

# Florida

Florida State Board of Conservation  
Marine Laboratory  
St. Petersburg, Florida

**Crickets For Fishing**  
**Fish The Cover**

*Fishing • Hunting  
• Conservation •  
Outdoor Recreation*

# WILDLIFE

APRIL 1966

*The Florida Magazine for all Sportsmen*

25 CENTS

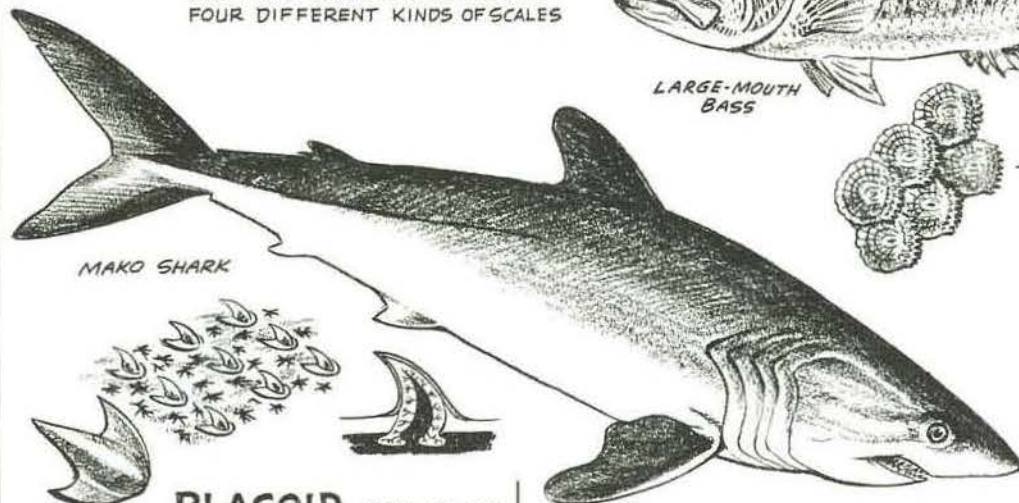




# Florida Wildlife Scrapbook

## FISH SCALES

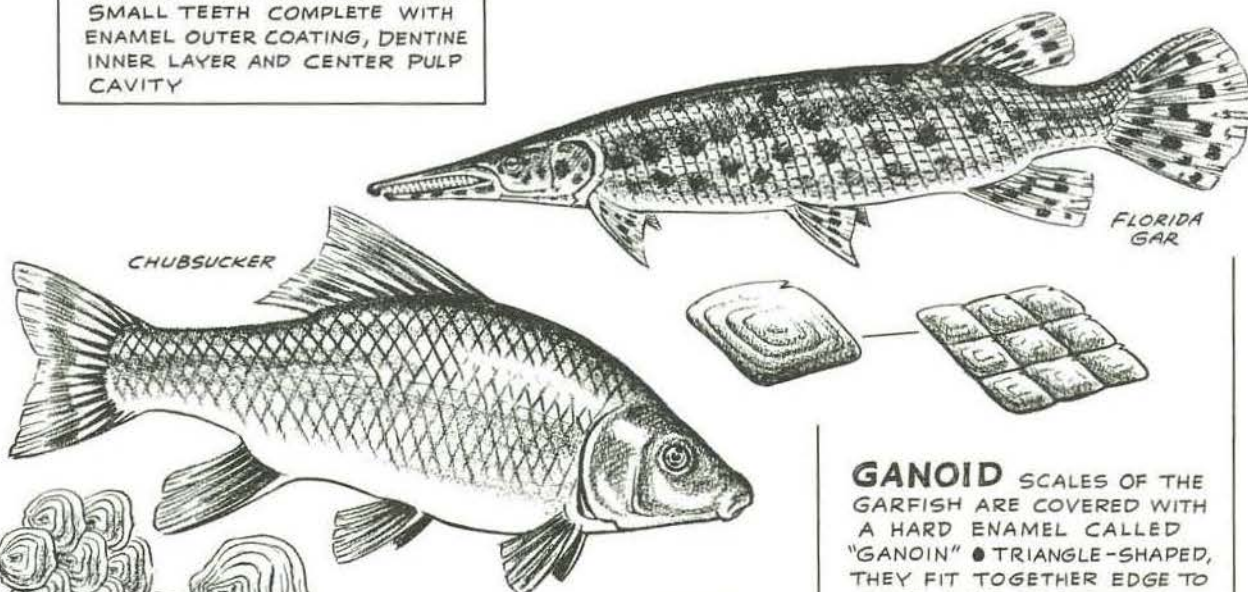
EXCEPT FOR A FEW FISHES  
SUCH AS CATFISH AND LAMPREYS  
ALL HAVE SCALES • HERE ARE  
FOUR DIFFERENT KINDS OF SCALES



**PLACOID** SCALES OF  
SHARKS AND RAYS ARE LIKE  
SMALL TEETH COMPLETE WITH  
ENAMEL OUTER COATING, DENTINE  
INNER LAYER AND CENTER PULP  
CAVITY

### CTENOID

SCALES OF FISH  
LIKE THE BASS AND  
SUNFISH OVERLAP  
LIKE SHINGLES ON  
A ROOF AND HAVE  
A COMB-LIKE EDGE  
ON THE POSTERIOR  
RIM OF THE SCALE



**CYCLOID** SCALES OF FISH  
LIKE SUCKERS AND MINNOWS  
OVERLAP EACH OTHER LIKE  
SHINGLES • DIFFER FROM  
CTENOID SCALES IN HAVING  
SMOOTH REAR EDGES

**GANOID** SCALES OF THE  
GARFISH ARE COVERED WITH  
A HARD ENAMEL CALLED  
"GANOIN" • TRIANGLE-SHAPED,  
THEY FIT TOGETHER EDGE TO  
EDGE LIKE FLOOR TILE

Wallace  
Hogges

# Florida WILDLIFE

VOL. 19 NO. 11

APRIL 1966

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Game & Fresh Water Fish Commission  
State of Florida

★

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## The Cover

*To many anglers Florida and Largemouth Bass fishing forms a blend, similar to ham and eggs. Add to the fishing the pleasantness of early spring weather, plus a pretty girl, and the picture is perfect for a cover scene.*

Color Photo From Cypress Gardens, Florida

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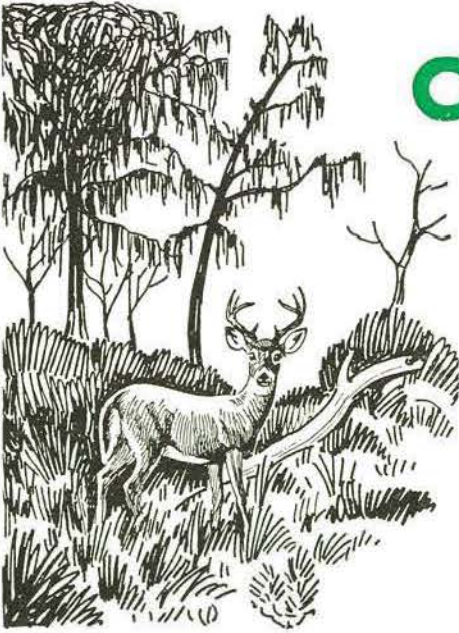
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# CONSERVATION SCENE

## New Steps Taken to Halt Decline of the Bald Eagle

FROM THE FRINGED gentian to the tassel-eared squirrel, 36 of America's greatest living examples of natural beauty are featured on a new set of decorative stamps. Produced and distributed by the National Wildlife Federation, these stamps have been issued each year since 1938 and mailed to persons interested in conservation and wildlife. More than two million citizens throughout the United States will receive the 1966 edition during the next six months, according to J. A. Brownridge, Business Manager of the Federation.

Lithographed in full-color from original paintings by some of the country's outstanding wildlife artists, the 1966 wildlife conservation stamps feature portraits of six mammals (whitetail fawn, muskrat, woodchuck, spotted skunk, armadillo, and tassel-eared squirrel), 12 birds (Canada jay, Cuban trogon, pine grosbeak, Arctic loon, house finch, boreal chickadee, redhead duck, common eider, snow bunting, burrowing owl, brown thrasher, and red-breasted sapsucker), nine fish (redestye bass, Arctic char, rainbow darter, golden shiner, guppy, paddlefish, lake whitefish, peamouth and channel catfish), four butterflies (dog face, zebra, atala, and Baltimore), plus depictions

of the ground beetle and baldcypress tree.

Under the direction of Federation Art Director Roger Tory Peterson, an art team of Don Eckelberry, Louis Darling, Rudy Freund, Guy Coheleach, Don Mallick, Maynard Reece, Charles Ripper, and Peterson have combined their talents with those of the graphic arts in the production of an outstanding set of dramatic portraits. The result is a sheet of colorful stamps suitable for any decorative or educational use. Many school children and teachers use these stamps in learning about American wildlife and save them in special albums published for that purpose by the Federation. The albums contain complete descriptions of the species portrayed on the stamps plus other articles of interest to nature students.

### Winter Waterfowl Count

THE MID-WINTER WATERFOWL survey conducted jointly by the Florida Game and Fresh Water Fish Commission and the U. S. Fish and Wildlife Service was carried out this year between January 2 and January 8. The survey showed an increase of nearly 840,000 ducks in the areas observed.

The inventory is part of a nationwide program to collect data for waterfowl management purposes. The survey, conducted by airplane is considered to be an indicator of trends in waterfowl populations. The increased number of birds observed in Florida during this survey does not necessarily mean duck populations are on the rise nationally.

The grand total for Florida, in-

cluding all species was 1,605,066 birds. The 1965 total was 768,853 while the 1964 total was 1,153,300. Although the 1965 figure showed a decrease as compared to the 1964 figure, the 1966 count exceeds that of 1964 and 1965. The increase was made up principally of scaup, baldpate, redhead and blue wing teal.

Canada geese showed a continuing decline. The 1966 total on this species is 6,000 geese, a decrease of 1,000 birds from the 1965 count of 7,000. Most of the geese were observed in or near Leon County and the St. Marks Wildlife Refuge in Wakulla County. The Game and Fresh Water Fish Commission is presently engaged in an accelerated study of the Canada goose decline and working to return the former wintering population to Florida.

The count showed that "puddle" ducks which include mallards, blacks, Florida ducks, teal, gadwall, baldpate and pintails increased over last year. The diving ducks showed an increase of some 421,500 birds.

Observers reported that the mid-winter waterfowl survey was conducted prior to the late January cold weather and the waterfowl population in Florida probably increased as cold weather reduced the expanses of open water in the northern states.

### Bald Eagle Protection

SECRETARY OF THE INTERIOR Stewart L. Udall recently ordered new protective steps to halt the steady decline of the bald eagle—America's symbol—in the contiguous 48 states. He warned that

(Continued on page 32)



## U. S. Senate Approves The Wild River Act

FIRST CONSERVATION bill to move in the new session of Congress was the Wild Rivers Act, approved by a 71 to 1 Senate vote, the Wildlife Management Institute reports. The widely supported proposal now goes to the House Interior and Insular Affairs Committee where it may run into some difficulty particularly if Congress adjourns near mid-year.

The Senate bill basically sets forth congressional intent to forever preserve some freeflowing rivers of the U.S. for their water conservation, fish, wildlife, scenic, outdoor recreation, and other values. As reported by the Senate Interior and Insular Affairs Committee, the bill, S. 1446, created a National Wild Rivers System consisting initially of parts of the Salmon, Middle Fork of the Clearwater, Lochsa, and Selway Rivers, Idaho, Rogue River, Oregon, Rio Grande River, New Mexico, and the Eleven Point in Missouri. A surprise amendment on the Senate floor added the Cacapon and Shenandoah Rivers, West Virginia, to the system.

S. 1446 proposes study of the following rivers for possible addition to the wild rivers system: Buffalo, Tennessee; Green, Wyoming; Hudson, New York; Missouri, Montana; Niobrara, Nebraska; Skagit; Washington; Susquehanna, New York and Pennsylvania; Wolf, Wisconsin; Suwanee, Georgia and Florida; and the Youghiogheny, Maryland and Pennsylvania.

Other Senate amendments to the bill were mostly of a clarifying or technical nature. One important amendment stipulates that all rivers within units of the national wilderness system shall be subject to the provisions of the Wilderness Act, with the utmost care given maintenance of their wilderness character. ●

## Conservation Convictions and

# Human Self-Interest

By ERNEST SWIFT

National Wildlife Federation

DR. LES PENGELLY, School of Forestry, Montana University, has proven himself both a philosopher and an able writer. He has the faculty of finding the "eye of the hurricane" in his conservation themes, with humor and without pomposity. Both are admirable qualities.

His thesis, "The Art of Social Conservation," should receive a wider range of readers than I imagine it has. No doubt many converts have read it; the unconverted, finding no fish and bear stories included, might well pass it up. They are not about to be contaminated by philosophical conservation imagery.

In it, Dr. Pengelly attempts to blend our economic and recreational needs and show that they are inseparable. To broaden the base, it is healthy to winnow and sift the ideas of many people. Such a course encourages both enlightenment and tolerance.

To emphasize his own original logic—which is considerable—Dr. Pengelly quotes a number of great philosophers, teachers and administrators, past and present. This is a justifiable means of proving that many people have been and are concerned with a common subject.

However, after years of personally attempting to locate the "eye of the hurricane," I find that our leadership often skirts, glosses over, or fails to explain in bold language the basic principle which dominates all conservation effort. And that is self-interest of the individual.

Dr. Pengelly gets mighty close at times. He states that most textbooks dealing with natural resources fail to mention human resources to avoid complicating the picture. Then he goes on to say, "The airy dismissal is justified if we can assume that proper conservation of the parts of the natural resource complex adds up to a proper conservation of the total human resource." I am not sure whether he favors the "airy dismissal" or the "assumption."

In other words, human beings are a part of the community of life, dependent on resources for survival. If the natural resources are cared for, this insures human survival. In my opinion the resources must be of first concern or there will be no life continuity.

Dr. Pengelly goes on to quote Laurance Rockefeller, chairman of the ORRRC, in stating his personal philosophy that people are the factor motivating conservation and that he believes nature was created for man's enjoyment.

He then states: "There is stronger evidence, however, that when the emphasis is placed only upon the accumulation of material wealth as an end in itself, civilizations have declined and nations have perished."

The statement is correct, but does not go far enough. Since man first stood on his hind legs he has attempted to create a favorable Jehovah image of himself, but as judge and jury of his own conduct—which is not accepted in his own creation of jurisprudence—he is bound to be prejudiced. Nor does man want any

(Continued on page 33)



# FISHING



By CHARLES WATERMAN

Although the gar fish is hard to hook, it will strike at a variety of baits and artificial lures

OUTBOARD MOTORS PROBABLY cause more minor physical injuries than do blocking backs. Somebody around a boat dock always seems to have a sprained shoulder, a strained back or a stiff neck from cranking an outboard. I don't know how many times I've banged up myself pulling a starter rope.

Pulling a starter rope, you see, is an unusual motion, employing stresses seldom encountered at any other pursuit. In fact, about the only similar project I can think of would be trying to open a badly stuck door while standing on a teeter-totter.

After a lot of years of random yanking on starter ropes, I learned how from a 200-pound weightlifter. I was fishing with him and he was running the manually started motor. Each time he pulled the string he'd stand up, put his feet wide apart, take the pull cord handle in both hands and, with his body facing at right angles to the motor, he'd pull through with a swing of his shoulders and arms, turning a little at the waist. It is an underhanded pull—a quick, snappy heave with a little wrist action. In long experience with outboard motors he'd learned that halfway measures are likely to get you all kinds of aches and pains.

Some motors have pretty short cords and some motors that are normally started electrically have rather flimsy rewind apparatus for their pull cords. Rewind assemblies are frequent casualties if you pull the rope too far as most of us have learned to the accompaniment of strong language.

Repair men say that small persons of slight strength are especially likely to tear up starter assemblies. They give their all and make a long, slow pull instead of a whippy snap. Something breaks.

The newer motors are easier to crank than the old ones but I have found a few of the new starting assemblies have very short ropes and, even though nothing breaks inside the engine you can danged nearly bust a wrist when you come to the end of the line.

If your boat will allow you to stand up safely, do so by all means. Reaching back over the left shoulder with the right arm to pull a cord is pretty rough on the human anatomy and reaching up from a sitting position to pull the rope of a large motor is dangerous too. Underhand is best.

The jackets on many modern motors are built to

reduce noise, of course, and it's necessary to open a little trap door on many models before you can grab the handle. The edges of the opening may be sharp and sometimes the little trapdoor doesn't fold down enough to really be out of the way. I have left several ounces of knuckle on these little doors. If yours doesn't drop below where you want to pull through, better alter it a little.

If you think this dissertation belongs in the boating department that just shows how little you know about boating departments. People who read them have electric starters.

MOST JIGS AND FLIES used in Florida waters are made of easily acquired bucktail or chicken feathers. The acquirement, cleaning and dyeing of various feathers and hair for fishing purposes is an important business for a small segment of the fishing industry and some flies are built of exotic materials extremely hard to come by.

When my wife Debie started doing a little simple fly tying some years back (in response to my heart-rending wails of excessive fly costs) I, personally, retired from the field after making a few clumsy tarpon streamers but she got into some fresh water trout flies that required unusual feathers, even though she has never claimed to be an expert.

Talking about this material business to a professional fly manufacturer, I asked why there seemed to be such vague information about some of the hair and feathers and learned that much of the material is smuggled into the country by roundabout means to avoid bans on the importation of birds and animals. This doesn't mean that I have been conniving with such law breakers because by the time the material gets to the user it's probably been through a lot of hands and I don't even infer that major suppliers of material condone such practices but I have found considerable silence about some odd ball feathers called for now and then. I wouldn't know which materials made illegal entry anyway.

But in case you thought any barnyard rooster can furnish satisfactory plumage for any kind of fancy fly you might be surprised to learn that the list of needed materials include hair and feathers from





A good way, at left, to wrench your back, hurt your wrist, bang your hand and sprain your elbow. It's a careless position for cranking an outboard. The right way to start a big outboard, below, is to stand up, use both hands, and pull underhanded.



polar bear, several kinds of exotic pheasant, European Blue Jay, various foreign gamecocks, American and foreign ducks, several kinds of monkeys and squirrels and numerous songbirds, the collection of which is kind of illegal to say the least. I doubt if illegal collection for tying purposes is any major population factor, however.

I'VE SEEN QUITE A FEW plans for releasing snagged lures. Probably the most popular is a "bait knocker," simply a heavy ring attached to a strong cord. There's an opening in the ring somewhere and it's hooked on to the line and slid down to strike against the snagged bait. It's a lot better than nothing although it doesn't always work by a long shot.

It takes up more room than a "knocker" but the niftiest gadget I've seen is one used by Wayne W. Lewis of Fort Myers. Mr. Lewis simply takes a calcutta pole, cuts off the small part of the tip and installs the largest tip-top guide he can find. He then saws a slanting cut in the side of the guide so the snagged line can be slipped in and the guide can be pushed down to the hang-up.

Much of his fishing is the trolling of heavy jigs, he says, and the system of retrieving lures had proved highly successful. I submit that it would be possible to use the other end of the heavy calcutta as an emergency pushpole or boat hook. Most of the mechanical de-snagging gadgets I've seen were of questionable merit but this one seems fool proof and sure fire.

BUSINESS BEING WHAT it is, many of the proud names of the tackle business have been hung on inferior merchandise, especially in the reel department. Short cuts and more short cuts to manufacture have enabled builders to keep their heads up in a very competitive field.

To the fisherman this means that a Whoozis reel which once led the world in value may now be made of inferior stampings and cheapened metals in order to meet price in the face of rising labor costs. The time has come when you'll have to go a bit past the trade name to be sure of quality in more than one instance.

FELLOW WROTE ME the other day asking about methods of catching garfish on rod and reel and it turned into a pretty tough one to answer as I've seen them caught *occasionally* on all sorts of rigs but I can't say that I know of any one method that excels.

In south Florida canals where they sometimes school up in great numbers you can catch them on all sorts of artificials and they'll take shrimp, worms, bait or shiners but most of those gar are quite small.

There are several kinds of gar, the big daddy being the alligator which grows to tremendous size and puts up a rough battle on heavy tackle. For a while there were numerous reports about catching them in southern rivers but I haven't heard much lately. I think most of them took large cut baits or live fish. Many Florida gars, usually much smaller than the alligators, bite on plastic worms and slow-moving plugs. They will take small surface plugs although the ones I've caught are not hard or fast strikers. They'll often follow the bait for a long way, seemingly out of curiosity and with no intention of striking.

A gar is extremely hard to hook and difficult to  
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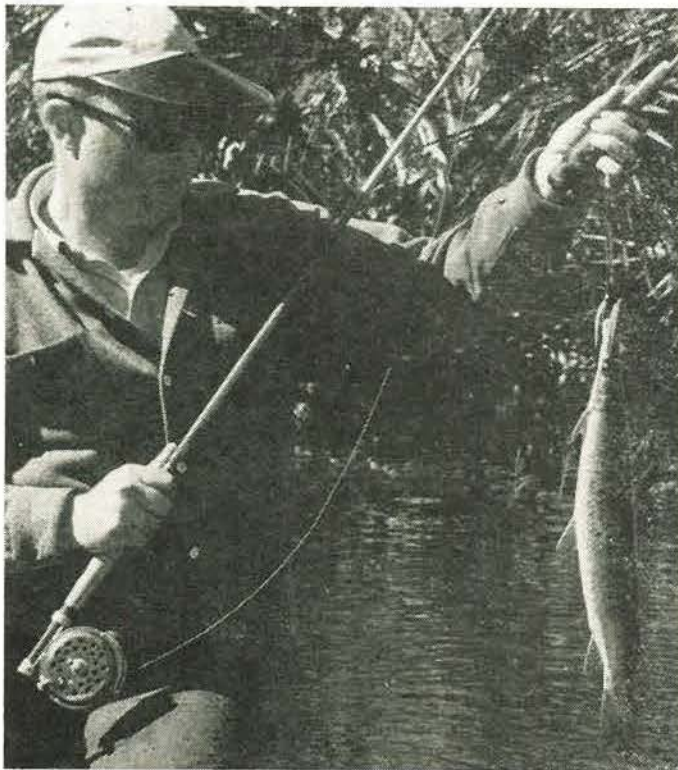
land because the hook generally pulls out but once it gets solid placement in the bony jaw you'll have your hands full getting it loose and many folks don't like to take hold of a gar, viewing it with the same revulsion they hold for snakes. You can get bitten by a gar but I don't think they ever actually snap at you the way a bluefish will. Most gar will thresh on the surface although they can hardly be credited with leaps.

Don't get the idea I can go out and catch gar any time. Most of those I've caught have been taken in places where they were thick, sometimes lying so close together as to do a general shift when one fish turned. Although their teeth are sharp, they're made for holding rather than cutting and they don't nip off the line the way a barracuda will.

I never ate a gar and most folks wouldn't consider them as food although Seminole Indians consume quite a few, generally spearing them in shallow canals. Gar gigging or bow hunting can be done legally if you'll check with a local conservation official for permission. Neither method is likely to substantially reduce the overpopulation but it won't do any hurt and can be fun.

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I SEE THAT SOME rod makers are placing the



At some time or another a gar is likely to bite on most anything, although its hard, pointed mouth makes it difficult to hook them. The one above grabbed a bucktail fly in a south Florida canal.



guides along the side toward which the stick naturally bends in the case of casting rods and on the opposite side in spinning and fly rods. It's logical enough in preventing the rod from taking a "set" although sets are of minor importance in good quality glass and some deep sea anglers who don't use their rods for casting actually prefer to have a set before they hook the fish.

In sighting down a rod blank you'll find that it almost invariably tends to bend a little one way or the other although I don't consider that a "crooked" rod. However, if there are two or more bends, plainly visible, I'd say it's a poor blank. Really crooked rods have unusual stresses and are apt to throw a lure where you aren't looking but that isn't necessarily true of one that simply bends gently into a natural set caused by long use. Sometimes most of the set is caused by a ferrule and the rod itself isn't bent much.

Bamboo rods will usually set to some extent and some of the most expensive fly rods in the over \$100 bracket set pretty badly and pretty soon. I find that impregnated bamboo holds its shape in most cases with only minor setting.

In most cases a slight bend in your pet casting rod is nothing to worry about. After long, hard use it is customary to have the guides placed on the other side of a rod that has begun to set but such a procedure can change the action and the worst combination is north or south guides on a tip that bends east or west. I'm no physics professor. That's the best I can explain it.

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HISTORIES OF FISHING are incomplete as historians have unaccountably shown considerable more interest in political upheavels than in lure and rod developments but in looking over some works on ancient angling I find some tentative dates that are interesting.

Nobody pretends to know when live or cut bait was first suspended from stone or bone hooks but artificial lures may have been in use 200 years, B.C.,—most historians suspect that the lure was some sort of fly and flies were definitely in use in the Middle East in the third century.

After the flies came the spoons, possibly made from shells at first, and artificial minnows were in



The best way to pole a heavy boat. Fishing guide Stu Apte leans against the pole with his hip as he sets his course across a Florida Keys flat.



use around 1800 in England. The "plug" as we know it came considerably later.

Spoons were commercially produced in America about 1848 and the pilot models were evidently fashioned from kitchen utensils. The New Fisherman's Encyclopedia, edited by Ira Gabrielson, says the first plugs were patented at about the same time, late in the 1800's, and were the Heddon Dowagiac and the Rush Tango. Plugs were on the market about 1898.

The first plugs are still good fish catchers and those of 50 years ago can hardly be told from the current crop in most cases.

I think it is very strange that the "jig," one of the most elementary forms of artificial lure, took so long to come into its own in fresh water. As recently as 1946 I heard a party of fishermen laughing loudly at a friend who in desperation tried a salt water jig on black bass. Since the spinning rod is almost ideal as a light jig manipulator, I'm assuming that the popularity of spinning really put the show on the road for "leadheads, doll flies" and "darts"—simply freshwater names for jigs.

ALMOST ALL FRESH WATER fishermen find use of a pushpole convenient at times but real pushpole wizards are found in the Keys and we could take some advice from the island lads.

About the best poles are made of fiberglass and about the same size as vaulting poles. In fact some of the pushers use vaulting poles (generally factory seconds) and professional guides may prefer them up to 16 feet long but such fancy rigs probably

aren't suited to the small water angler who can generally get a highly satisfactory pole by simply buying a piece of 1½-inch round at the lumber yard. One-inch stuff isn't tough enough for me and 2-inch poles are unnecessarily big for casual use. Usually 12 feet is about minimum length.

The "foot" is a matter of personal preference. I just use a triangular piece of wood fastened to one side of the bottom of the pole but such a rig would undoubtedly bring accusations of "greenhorn" or "Yankee" in some circles.

Expert polers generally push toward the rear, guiding the pole along their hips and they get incredible speed. I've heard it said that expert Seminole polers, working in pairs, could get nearly 10 miles an hour from their dugouts but that seems pretty fast and the estimate isn't mine. I do know that some Keys guides can go like the devil with heavy boats I wouldn't consider poling equipment at all.

I did a little poling for Stu Apte, the guide, and he kept bawling me out for inefficiency but Stu, who is capable of chasing cruising fish all over a flat that's too deep to pole anyway and goes at what I consider terrific speed, says his former guiding partner, Woody Sexton, was the Keys champ.

Woody, who is a physical culture fan and weight-lifter, is also a canoe racer, doing 100 miles a day without strain, and is a very powerful man in addition to being something of a crank about technique.

Anyway, a few minutes of concentration with technique will show you how to get the most out of a pushpole, even if it takes a lot of practice to cash in on your information. ●





For bobber-bouncing action,  
try the bream bait deluxe

# CRICKETS



By ART HUTT

**I**F THERE'S ONE BLUEGILL bait that will make more bobbers bounce, it's that odorous, soft morsel that thrives in the heat, sings unconcernedly while awaiting its fate, and has the annoying habit of jumping when it should hold still.

Southern fishermen will tell you that a properly schooled bream (bluegill) will fin its watery way past a row of hooks baited with wriggling worms to get at the impaled tidbit of a cricket. Delicate and bite-sized, this tasty teaser attracts the hand-sized hustlers as readily as a display of penny candy draws drooling small fry.

Most of the old pros who dunk these six-leggers will agree on several bait-saving, bluegill-gaining tips.

The most important deals with the rig.

Being so soft-bodied, crickets do not adopt ideally to casting. They can be used on spinning gear if your backcast is cautious and easy. Held on a clean bottom by a light sinker, a cricket waving in the current makes a bluegill's eyes bulge.

But cane poles with monofilament line, a sensitive float, a small split-shot, and an about-size-eight wire hook makes a topnotch bream-busting outfit. In brush or vegetation, up to 12-pound test line can be used; in open water, stick to 6 or under.

Sensitivity and tight lines are important as a resourceful bream can yank a cricket off in a flash. Caught with a too-heavy or a too-slack line, the damage is done before you can react.

As confirmed cricketeers warn, "When that cork goes down, you either hook your bream or you have lost a chance."

And, when you find that small bream are swiping the bait before it can get down to the keepers, experts advise going to a slightly heavier split-shot to hurry the cricket past the small fish which com-

monly are closer to the surface so that the delicacy can sink unscathed to the bigger ones below.

Hooks should always be the fine wire type. Sometimes the sliced-shanked bait-saver type will keep the flimsy cricket from being pulled off so easily.

How do you hook a cricket? Frankly, my experience suggests it is relatively unimportant. When the bream are biting, a hook threaded down through the abdomen from the underside in the direction of the tail is a good method to keep the cricket on the hook. When bream are scarce and you need to attract them, a cricket pierced through his collar (thorax) can dangle enticingly.

Unless you are really into a mess of unselective fish, however, don't waste time dunking a decapitated or legless cricket. (Although there are rare times when pulling off wings, legs, and head will work.) It *might* get bumped, but your chances are much improved if you use a cricket with all parts intact.

Two crickets on one hook produce results at times.

Neophyte cricketeers frequently make the mistake of being too passive, sitting and waiting until a bream comes by, instead of actively seeking the fish out. A bream will smack a cricket quickly, if it is around and in the mood at all. So keep on the move—look for them.

A little jiggling of the bait helps, too. Crickets drown quickly. You can give them back a little "life" by keeping them bouncing a little. But don't soak a cricket forever. Keep a fairly fresh bait on at all times.

Being the crawling, jumping bait they are, some attention to those activities must be given in the design of containers for them. Such cages need not be elaborate. Just slippery-sided or confining in one way or another.



One angler I know uses a wide-mouth jar with a section of innertube around it to provide shade and to protect the glass. The slick sides cannot be climbed, yet the angler has an unobstructed access to a cricket when he needs one in a hurry.

I've seen a homemade affair with a piece of inner-tube stretched across a wide-mouth jar. A hand-accommodating, self-sealing slit in the rubber allowed an easy entrance to the bait.

There are many commercial models, from a 30-cent cardboard container to neat wire and wood cages. Very few have provision for shading the contents, however, but I think your bait lasts longer and stays livelier if you drape a cloth over it.

Just remember, though, that when you are in a hurry to get your hook rebaited, a container you can reach into quickly is a good choice. One that lets you shake a single cricket down through a slippery funnel has merit, too.

Also, if you want to hold some extra crickets over for a few days, give them a piece of peeled potato to chew and suck on. They'll thank you for it by staying healthy until the next bream bout.

But a problem of fishing with crickets has been one of having a reliable source of supply. More than one bream (or trout) fisherman has wasted hours poking around in the dark dampness under rocks or boards, hopeful of uncovering a prize or two—and

of catching it before the bouncing object could make its get-a-way.

Years ago we had our pre-fishing methods.

Before the popularity of sliced bread, we'd turn our youthful charm on the local baker and talk him out of a stale loaf, split it, then scoop out the insides. We'd reassemble the loaf, punch cricket-accommodating holes in each end, and place it in a likely spot overnight. By morning, we'd have up to two dozen of the black rascals—but usually less. Plus other assorted beasts that sometimes fit on our hooks. Frequently a hungry hound would make off with our "trap," too.

A shoebox, properly pierced and placed, loaded with table scraps, could usually attract a few crickets for us also.

Normally, the space-age angler lacks the time and the desire to get involved in do-it-yourself cricket collecting. On the other hand, nothing is as disconcerting as having a bream-bed fishing trip planned, and then come up with only a ten minute's fishing supply of crickets.

Happily, "factories" producing millions of chirping charges per season have reduced this concern to a great big zero. The modern angler, cricket cage in hand, hastens to his friendly neighborhood bait shop and "collects" a hundred crickets in as many seconds. Price is painless—about \$1.00 to \$1.50 per hundred.

For temperature's sake, most of these cricket farms are in the southern states. In Florida, the largest, Lucky Lure Cricket Farm at Leesburg, produces 7-to-8 million crickets in their big season from April through August. As you would assume,

*(Continued on next page)*

A black field cricket, above left, or a store-bought brown one, impaled on a hook, often prove irresistible to bream. Experienced fishermen say that bream, below, will pass up other baits to dine on a tasty cricket.

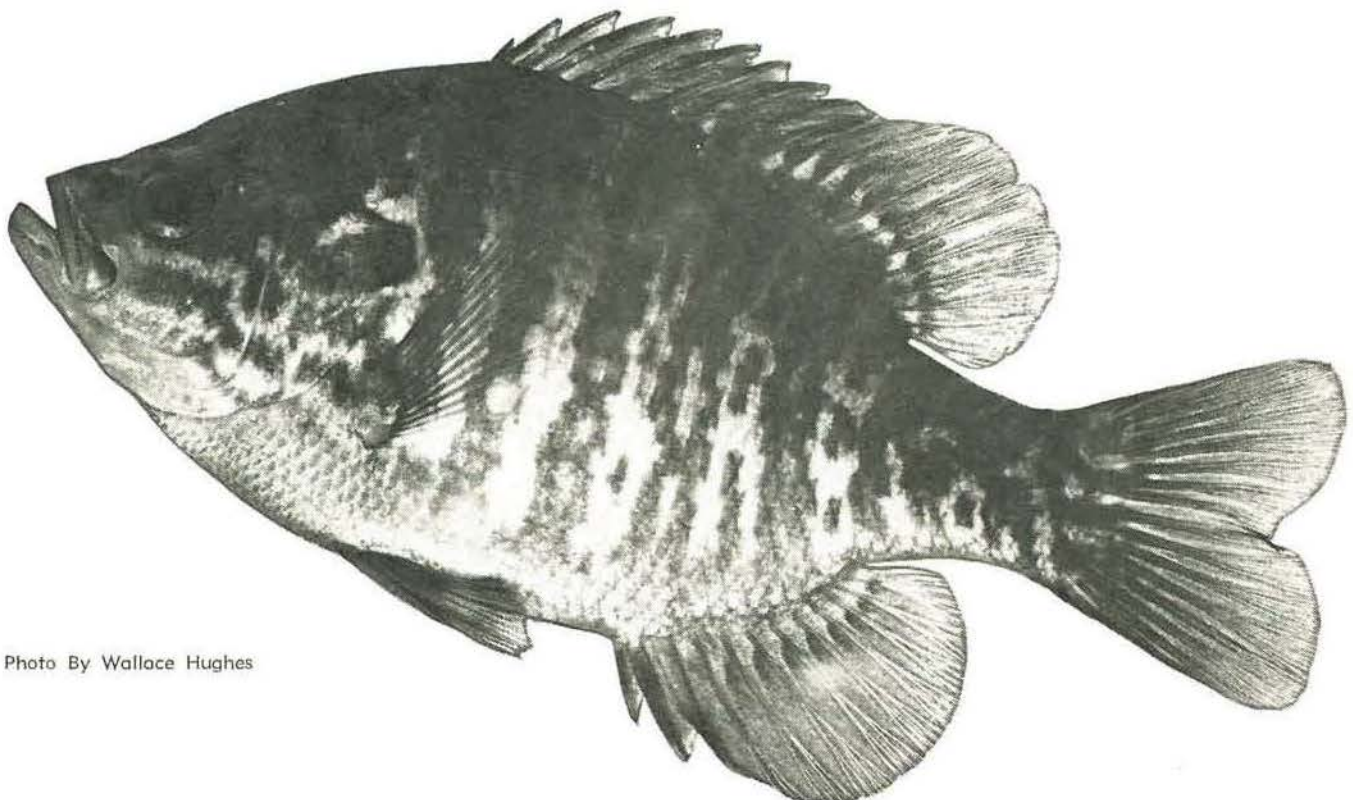


Photo By Wallace Hughes





Inside a cricket farm, above, an attendant uses small garden cart to distribute laying mash to crickets housed in double-deck, eight-foot long growing boxes. Crickets self grade themselves, above right, for commercial raisers. The small ones crawl through mesh; bait-size can't make it. In the holding box, right, thousands of ready-to-go crickets eat what may be their last meal.



(Continued from preceding page)  
raising such astronomical numbers involves more than a few lard cans full of breeders placed in a darkened room and ignored.

Commercial raisers use gray crickets, not the common black field cricket. Actually, rather than gray, they're a light brown in color, and seem to have a built-in odor which endears them to the smell-conscious bream. In captivity, they are prolific and healthy.

In commercial raising, the first pre-season step involves the over-wintered breeders. The adult female crickets obliging use their long ovipositors to lay up to two hundred eggs each in trays containing moist sand. As soon as hatching begins, usually

about eight days later, the pans are moved into the growing boxes where the tiny nymphs gradually develop into baithood—a process taking another six weeks.

If all goes well, two batches—or sometimes three—can be run off in one season.

At the Leesburg "factory," crickets spend the most pleasant part of their life in one of two concrete-block buildings which house the coffin-sized growing boxes—three hundred of them. To keep the inquisitive occupants in their place, the sides are of climb-proof aluminum. The tops are screened to keep other small varmints and parasites out, and the wooden bottoms are covered with sand. A foot-high pile of excelsior gives the songsters something





For counting, left, the bait dealer dumps crickets through funnel into a jar. This jar holds fifty. There's variety in commercial cricket cages, right. Screen-windowed box is used for shipping.

Photos By Art Hutt

to crawl on; without it they'd pile onto each other and be crushed or suffocated.

It's not a bad life, cricket-wise. They're kept in the dark, which they like. To keep their cannibalistic tendencies in check and to make them grow fast, a generous supply of sterilized chicken mash is placed in their trays each day. When they have a thirst, they quench it at the water feeder—the type used to water chickens. However, the ring at the bottom has a foam-rubber insert to keep the crickets from drowning.

To pamper them further, a 90-degree temperature and a below-60 humidity is aimed at. Heaters are used whenever the temperature varies too far from the ideal. On warm days, fans circulate the air and dehumidifiers are switched on to dry it out.

Each growing box yields from seven-to-ten thousand crickets, enough to make a cricket counter crotchety if each one had to be counted individually. Crickets are obliging though, a trait used to advantage. Quart cans, previously punched with holes, washed, painted and sand-sprinkled before the paint is dry so the crickets can get a good grip on the surface are placed in the boxes. Several of these cans are placed at each end of a ready-to-go box and as the excelsior is slowly drawn away, a carpet of crickets scurries for the sanctuary of the cans.

The cricket-crammed cans are dumped into a lard can and taken to a grading box where they are poured into one of the several wire-mesh graders. Again, the cricket's cooperativeness helps. Those

that squeeze through the mesh of the grader are too small and ultimately discarded. Those that can't make it are of fishing size.

The salable crickets rest in holding boxes to await local distribution through jobbers, to be mailed, or to be put on a bus for a trip to another state. They ride in screen-windowed cardboard boxes, filled with excelsior. These boxes hold up to 1,000 crickets each and have ended up in every state in the union except Hawaii and Alaska.

By the way, crickets are rarely hand-counted. At the hatcheries or dealers, they are funneled into narrow glass jars. A pile of crickets up to one pre-counted mark will be a generous 100, another mark a generous 200, etc.

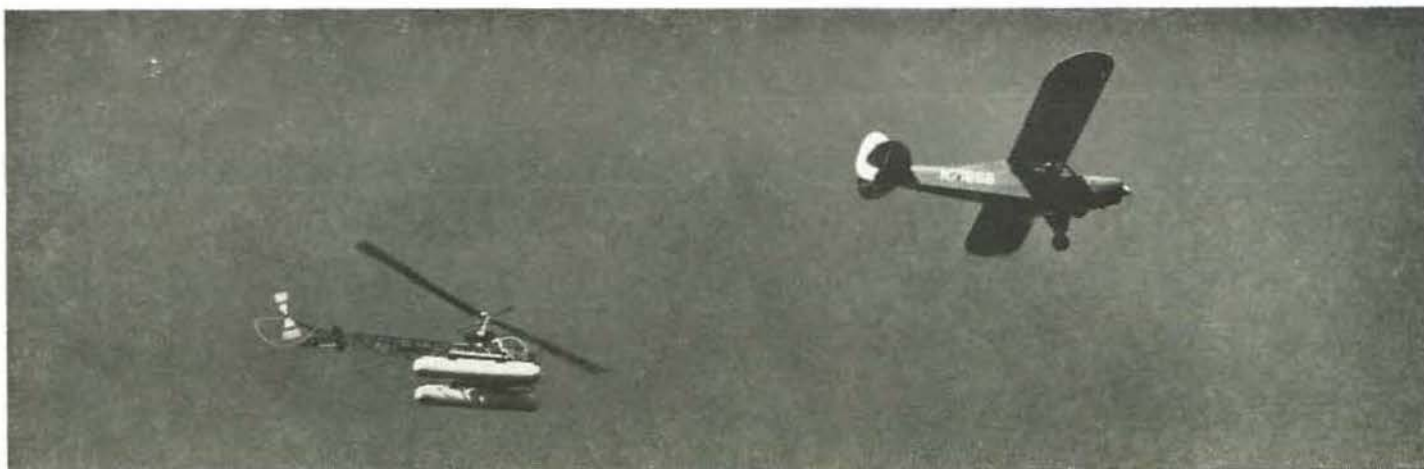
If you want to try your hand at raising your own crickets, there's no law against it. On a small scale you can follow the commercial method, using either the common black cricket or obtaining stock from a commercial raiser. Backyard Fish Bait, by biologist Ed Zagar, will give you some good tips. Write for it from the Florida Game and Fresh Water Fish Commission at Tallahassee. It's free.

With all the worries about heat, humidity, hygiene, disease, predators (ants are bad), feeding, watering, and sorting, for my part I'd just as soon do it the easy and reliable way at a penny or penny-and-a-half at the bait dealers.

It used to be that a cricket on the hearth was an omen of good luck.

Most bream fishermen now know that crickets in their bait box mean the same thing. ●





# LAW ENFORCEMENT

THE VAST Everglades, extending across the southern part of Florida, south of Lake Okeechobee, is one of the largest fresh water marshes in the world. As unique as it is in general topography—so it is as a huge hunting, fishing and outdoor recreation wilderness.

For the Wildlife Officers assigned to this strange "sea of grass," a completely different field routine is required, as unique as the Everglades and its available outdoor recreation pursuits.

There is probably no wilderness area in the country where such a variety of transportation means must be utilized by field personnel to patrol, protect, and aid the outdoorsman as well as the hordes of wildlife that roam these hundreds of square miles of sub-tropical marshlands. ●



The top photo shows team-flying patrol over the Everglades. The small plane, piloted by Gerald Fidler, acts as spotter for activities that may need close inspection, and the helicopter lands for "check out" by pilot Andy Hutchens. Best known patrol craft throughout the Everglades sawgrass country is the airboat, above, showing typical patrol by Wildlife Officer Jim Sistrunk. Aircraft and airboats also operate as a team, left, as chopper pilot Hutchens guides officers Sistrunk and Gary Phelps to area demanding careful investigation.





## — EVERGLADES STYLE

Photo Story

By JIM BRANTLY

Information-Education Division

Everglades Region Wildlife Officers, above, of Enforcement Area 19, Broward County, head out into the Everglades where they disperse to their respective patrol sectors. The photo below illustrates efficiency of airboating hunter inspection by helicopter, which can do work of both airboat and half-track with its ability to land on both wet and dry 'glades.

Next Page

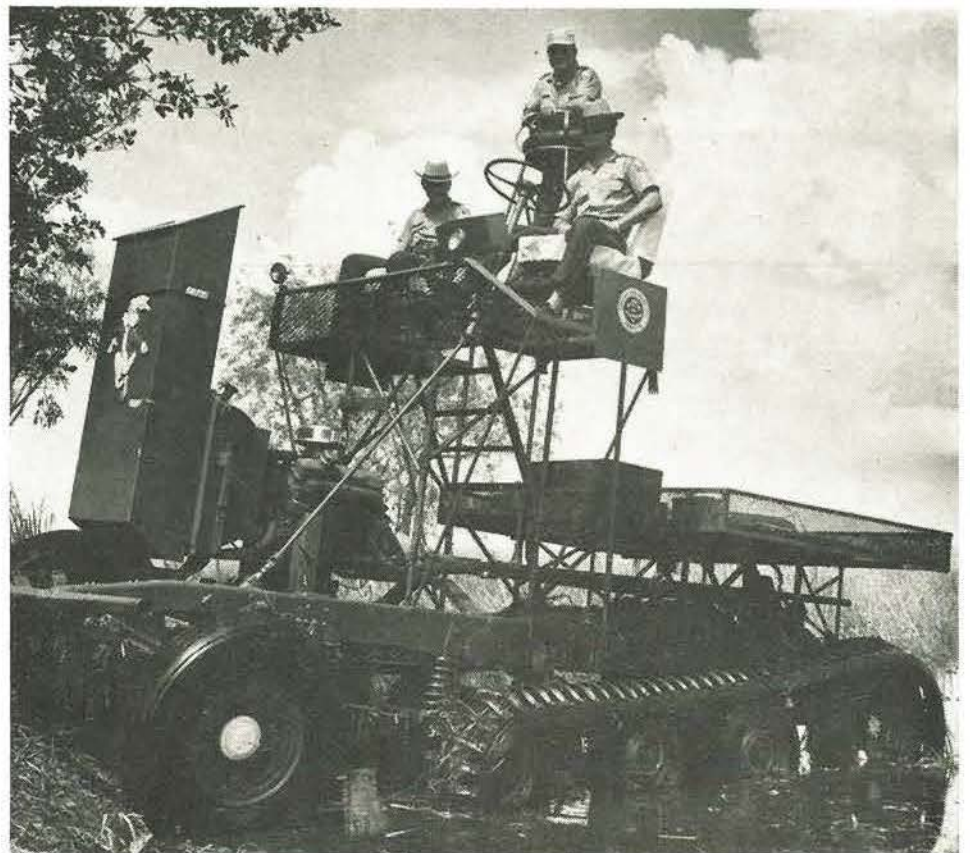






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One of the strangest vehicles used for Everglades Patrol is the Commission's special half-track, shown here with Wildlife Officers John Maple, George Eddie and Tom Morris. This is the only "land" vehicle that can operate through the sawgrass country, whether wet or dry conditions prevail. Wildlife Officers of the Everglades Region build and maintain their own equipment such as airboat, weasel and halftrack buggy.





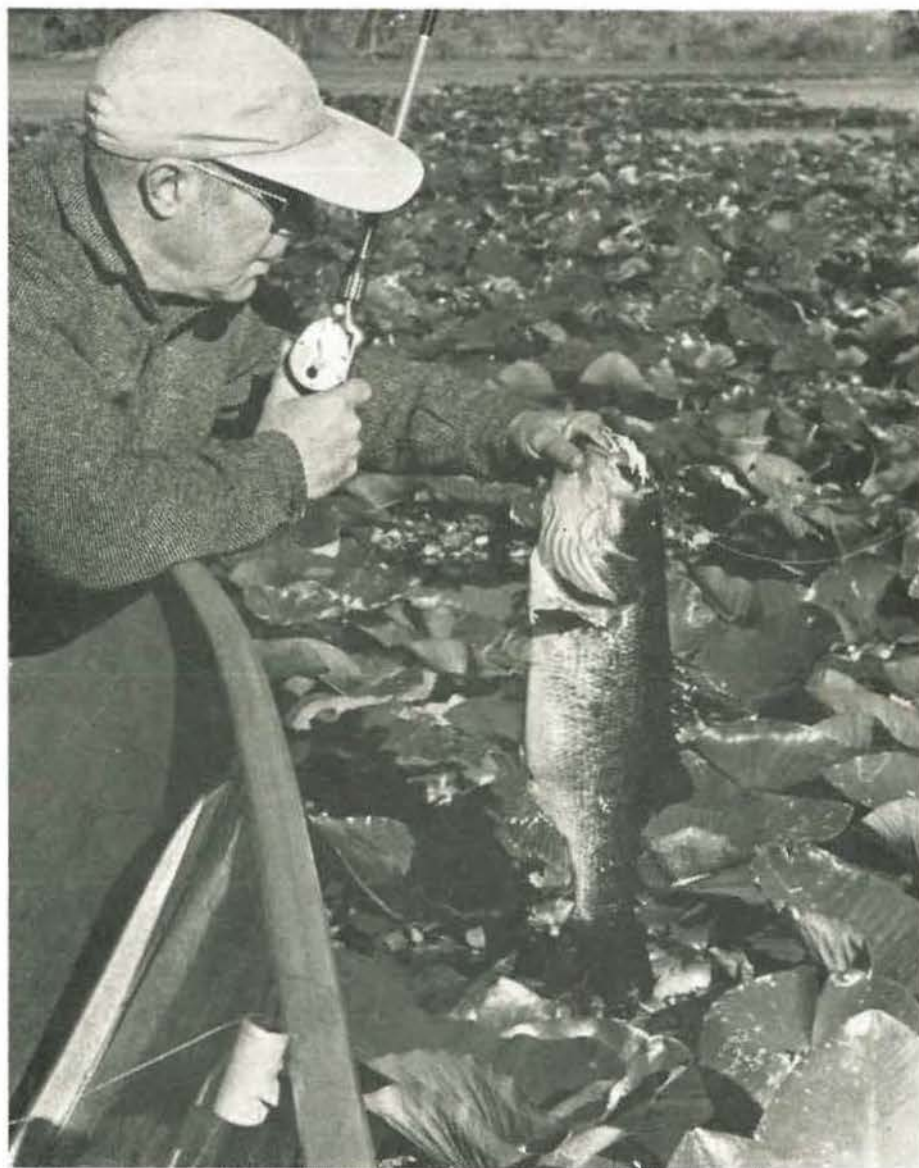
In the Collier County area of the Everglades, right, Wildlife Officer Waydon Durrance drives his special built wheel swamp buggy, maintaining radio contact with Cub pilot Gerald Fidler. Many sections of the 'glades are made up of dense cypress swamps, ideal havens for many forms of game and exotic wildlife.



Wildlife Officer Tommy Herne, left, patrols through cypress country in Collier County with "weasel," perfect vehicle for those areas where much of the surface is coral rock. This type of coral is generally found in the lower portions of the Everglades, along coastal areas that were at one time under salt water. The photo below is a closer view of Officer Durrance "plowing" his wheel swamp buggy past heavy cypress country in the western half of the Everglades.







Underwater growth and  
cover provide fresh water  
fish with both food  
and protection

# FISH the C O V E R



By CHARLES WATERMAN



ONLY FIVE PER CENT of the bass are to be found along the shoreline, announced the inventor of a method of open water fishing some 15 years ago.

"That may be," said one diehard, "but those are the five percent I want."

Fishing to the shoreline, around obstructions, across the bonnets and through the grass is what makes bass fishing for some fishermen, even though there are other ways of catching them. Thirty years ago, before spying on bass became well organized, I assumed all of the bass were along the shore and I never thought of fishing anywhere else.

Shoreline fishing has lately become somewhat out of date but there are times when it's still the best way and, even when bass aren't hanging out next to the edge, chances are they're around some kind of cover, even if it's in the middle of a lake and completely invisible to determined fishermen.

Bass aren't alone in this desire for something to hide behind or sneak through and the best crappie fisherman I know spends half of his time hung up in sunken brush. It seems the other half of his time is spent unhooking crappie. His credo is simply, "You gotta' be where they are to catch 'em," and he keeps prodding for snagged lures long after I'd have blown my stack and taken up slot racing or something.

Fish hang out around cover for two reasons—protection and food. I hear the Japanese have been building salt water reefs for centuries and we've been doing it here for fifteen years. When I was a kid, sneaky operators used to sink cut brush to attract panfish.

They like a bigger "reef" better but I've found salt water fishing extremely good over a wreck that had crumbled to a mere 8-inch ridge on the floor of a bay.

I was once taken by a guide to the wreck of a sunken inboard boat with promise of plenty of snook, channel bass and tarpon. When we got there it was a slick calm and the entire wreck was outlined by bait on the surface in only six feet of water. The guide knew just how much of the wreck was left and with a little help on his part I made out the outline of the hull remains, the engine and even the big flywheel—all spelled out on the surface of cloudy water by tiny bait fish. About that time the snook began to swim through the bait and I started casting.

The big fish couldn't hide in that little old wreck but the bait could or thought it could. The same thing happens in fresh water and sometimes a clump of vegetation is surrounded by bass who know the bait is in there and they just wait for it to come out. That is the real key to the case where a guy runs up to a clump of grass, cuts his outboard and starts fishing while the wake is still shaking the foliage. The gimmick is that his wake stirs up the bait, driving it into the open, the bass go on the prowl and fishing is good. That kind of operation doesn't always work but it works often enough to be worth an occasional try.

Where you have current, obstructions act both as hiding places and as shields from the moving  
(Continued on next page)

"Bonnet water," above left, can mean something this thick. Only a few lures will work in such a place and none are really bonnet proof. Not many anglers would attempt the spot shown at lower left, but there's plenty of water if you can get your lure down through the obstacles. Shoreline fishing to cover, right, will give the fisherman a look at some of Florida's nicest scenery.







A fallen tree such as this requires a little extra attention, especially where current turns it into a desirable fish haven.

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water. Only a stupid fish would keep swimming against the current if he could find dead water to rest in. When you drift a shoreline with a brisk flow, the fish are apt to be on the downstream side of stumps, trees or rocks. That doesn't mean you can't get a strike elsewhere as a loafing fish may be eyeing the swiftest current for food that drifts past and he may move out into it to scoop up what he wants.

Sometimes there are "dead" patches in a current, invisible to a fisherman. The right kind of an obstruction can sometimes pile up a bit of dead water upstream from the obstruction itself, even though it looks turbulent to the fisherman. Very swift, shallow rivers may have quiet pockets in the form of bottom depressions that hold good-sized fish. The best mangrove snapper fishing I ever had was in a shallow tidal runout with most of the water only three inches deep and swishing by at high speed. If you looked closely, you could see darker spots, indicating bottom pockets and each pocket had a hungry mangrove snapper who would grab any fly I got to him.

All sorts of things happen to the current in a bend of a stream making it a good bet for bass and panfish. Fishing a swift spring run, I have caught a lot of bream on popping bugs in water so shallow they actually showed their fins from time to time but they were in areas sheltered from the swift, main current.

The natural way for a lure to be worked past an obstruction in a current is downstream and across. Going straight upstream is unnatural; coming straight downstream it's hard to get any action from underwater baits. Surface lures, however, can be drifted past logical fish hangouts and twitched enough to be attractive without being hauled out of the strike zone.

If there's enough current to bring food to a fish, he'll generally take up a feeding station from which he'll move out to take or examine what passes and then return to his former position, which may be a little distance from where he actually intercepts his lunch. He's generally next to an obstruction that keeps the full current weight off him and conceals him from his prey but enables him to watch a likely sector.

Obstacles located in current are tough to work with live bait and probably the best method is with a cane pole and short line which enable a fisherman to keep a big shiner from tangling up. Many of the top Florida guides drift past such spots while running shiners on a slack line but most live bait users figure that kind of fishing is too much trouble and seek more open spots. Almost any time I see a boat being maneuvered downstream with someone running shiners before it, I find it's a professional guide on the oars.

Really cluttered shorelines are most easily fished with surface lures, current or no current. You can



see exactly where you want to toss it and most fishermen like to see a surface strike. Once you get a surface plug into some open water surrounded by stumps, weeds, logs or rocks it's nice to have one that will do its stuff without much forward motion because you may not be able to achieve a good lie on every cast and it's nice to work each effort to the limit—a procedure that appears easy but seems to be completely beyond some fishermen. Their idea seems to be that once the plug is on the water the main objective is getting it back to the boat and out of harm's way. Since bass are notorious for hang-fire operation on surface baits, this isn't the way to fill a skillet.

A surface bait can be kept in a very small area and still stir up a lot of fuss if you use very short and quick flicks of the rod tip, returning the tip to the place it started after each twitch. You'll generally make a plug move slightly toward you with each wiggle but it won't come more than a few inches if you're careful and that's the kind of manipulation that gets the most out of the cluttered shorelines, bonnet pockets or weed gaps.

Some plugs are especially adapted to this operation. The balsa-wood, Rapala-type plugs are pretty good at it. Surface plugs employing spinners don't have to be moved much if the spinners turn easily and a king of the tease'em-up-sit-in-one-place-and-raise-cane is the tip-up bait with a stern spinner and a nose that sticks high in the air until twitched.

It then bows and flicks a bit of water with the tail spinner. There are several makes.

The old South Bend Oreno line of baits doesn't seem to be very popular among late model fishermen but they were and are very effective. Fished on the surface, a Bass Oreno would do some wild things and you could make it gurgle and glurp right back under overhanging branches or a fallen limb right before your eyes—actually moving away from the fisherman because of its trough-shaped head. Of course it took a lot of practice to achieve the more startling effects. I seldom use them but I strongly suspect that if I could have only one plug, a Bass Oreno might be my choice. Works well under water too but not around obstacles because it tends to swing well out of the retrieve route on the way in. It's best to stick to surface manipulation until you're clear of the rubble.

If you don't fish over or around the cover, you fish through it and that's where the weedless lures come in. Most weedless bass lures are single-hooked or a couple of single hooks in tandem. There have been hundreds of designs with retractable hooks which spring into the open as the fish takes. Some of them work but they've never been best sellers.

Did you ever notice that the wildest creations are frequently the ones intended for weed operation? Whereas other lures may be vague or faithful  
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One of the author's perennial favorites for grassy water is the Hawaiian Wiggler, shown here with a pair of victims.





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imitations of living baitfish, the weedless spoon or pork rind bait looks like nothing that swims, walks or flies. Some of the best of them can be dredged right through an acre of eel grass without hanging up and still do a fair job of hooking but weed guards are accessories to be approached with slide rules and incantations. Too limber and you catch weeds; too stiff and you don't catch fish so I regretfully comment that the old time-proven designs get my vote most of the time.

Attaching spinners to the ends of wire weed guards is nothing new and probably the old Shannon twin spinner was the first popular lure to use that method. If the fish strikes right at the spinner or spinners he's getting a pretty square shot at the hook. Although hanging 'way out there some distance from the body of the lure, the outrigger spinner doesn't seem to scare fish. There's a theory that fish lying in pads or grass get sketchy looks at a bait anyway and just swat a series of impressions as a modern art lover drools over something which looks like an inky accident.

In late winter I've seen some horrific lures that were successful, an angler just hanging on additional spinners, beads and hula skirts until the thing became all he could hurl and the explanation is that bass are preparing to spawn and are on the prowl in an evil mood. Although bucktail and pork rind used to be considered essential features of the weedless "wiggler" type of lure, rubber skirts have pretty well taken over from deer hair and it's likely that the more subtle writhings of bucktail are lost on a fish who has to climb over a wad of coontail moss and dive through some eel grass to get at what he wants.

My favorite grass and pad lure is the Arbogast Hawaiian Wiggler No. 2, using a lush rubber skirt and possibly a real or artificial rind. I have seen this bait outfished innumerable times but I consider it a standby that wins more than it loses and I'm apt to start out with it when the cover is thick. That one is capable of spluttering along the surface and being fished deep when you slow down your reeling speed. It works best with a medium-action plug casting rod and most fresh water spinning rigs are a little too soft to handle it properly.

When retrieved across pockets it can be manipulated by use of a rising and dropping rod tip and erratic reeling that works it alternately deep and at the surface and, although it is sometimes very hard to haul through the foliage it generally gets back to the boat. This same system works with most of the wiggler type of baits and is excellent with the single-hooked spoons, generally used with



Best known of Florida's bass cover is that in Lake Okeechobee where "hayfield" is an apt description of some of the world's best largemouth bass fishing.

a porkrind. I like the single-hooked spoons with a rigid hook although I lose more fish with them than when I use a free-swinging trailer as on the Hawaiian Wiggler (it carries one rigid hook).

This pocket fishing is successfully done with a fly rod as you can flip a popping bug into a pocket and get it out without hanging. I confess that a fly rod is not the best tool for stopping a hooked fish quickly.

In some parts of the South, the surface spinners or "cluckers" are Number One lures where the cover's dense. They attract by sound as well as movement, of course, and although I frequently reel a wiggler type to the surface for benefit of splutter I haven't had such good luck with spinners that work constantly on top. Such statements, of course, are not only good for an argument but sometimes might produce physical violence so let's just say I haven't had enough experience with surface wigglers.

Where the thick cover is actually under the surface but near to it, the old-fashioned, sinking, torpedo-type plug with spinner fore and aft will



catch some mighty big fish when reeled so as to make just a trace of wake on the surface. It has an advantage over the shallow wobbling bait (plug with a lip or mouthpiece) because it can be steered through open areas better while a wobbling bait will go out of its way to hang up. Some experts, using light casting rigs or spinning rods, can fish the same way with a plastic worm but it's pretty specialized business.

Except with the surface baits, most of the fish I have caught in weeds and grass have struck fairly fast-moving lures but this may be a simple result of fast reeling to avoid serious hangups as it's hard to reel slowly with a bait that plans on sinking into the goop at the earliest opportunity. It is remarkable how well you can control a sinking plug with a fast reel and a high rod tip.

In most weedy, grassy or bonnety water an out-sized landing net with a strong handle will save a lot of fish as it's not unusual to get a basket of greenery along with the fish and when your bass actually gets down deep before you can start him coming you may have to conduct a dissection of your haul before you learn whether it's a bass or a mudfish you've defeated—and sometimes the fish isn't in the batch of foliage at all, having excaped early in the game leaving you battling the vegetation.

In very clear water such as found in Crystal River and the Homosassa it's only the underwater growth that makes it possible for you to approach

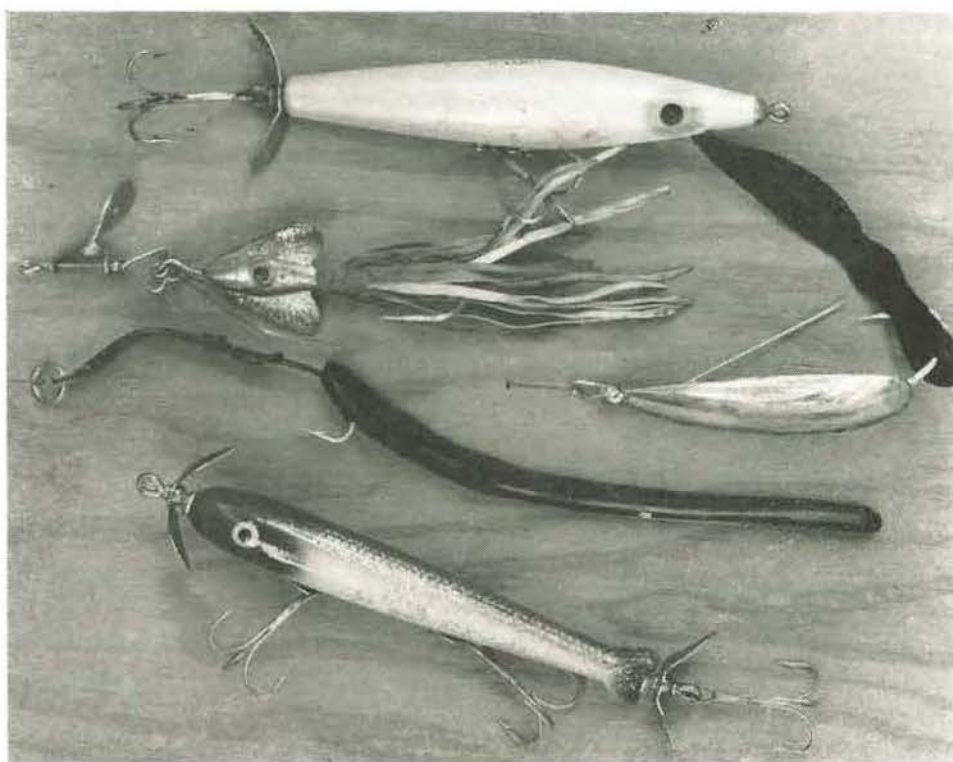
the fish. You cast a lure into an open spot in the coontail moss, for example, and the fish sees only the lure pop into his front yard, the boat and fishermen being concealed by the submerged forest. A little thought while maneuvering through such waters will enable you to approach likely spots before the fish are spooked.

Lake fishermen, especially, often neglect to learn just where underwater cover extends to and the simple soul who appears to be fishing in open water may know something you don't about underwater growth of one kind or another. The grass or weeds may be on the bottom and fish may be lying over it rather than under it.

Bass may be suspended a considerable distance from the bottom, temporarily, when feeding or they may loaf well up in bottom growth but if there are no obstacles to it, they actually lie near the bottom most of the time. In deep lakes they are apt to choose the depth they want by moving up or down the slope of a shore with light cover and many a fisherman has discovered the "secret" that by standing on the bank or holding his boat there he can cast a sinking lure well out, let it sink to near bottom and then reel it up the sloping bottom until he finds where the fish are living at the moment. Not many Florida lakes have that kind of construction but it's worth a try now and then.

Any time you start complaining about hangups and the trash that clogs your spinner, just stop and think how much fun it would be fishing in a well-stocked bathtub. ●

Some basic grass flat lures for the plugging rod. From the top, a popular floater, a wiggler type with rubber skirt, a weedless spoon and strip, a plastic worm rigged with a "lip" to run shallow, and torpedo-type plug.







Rhett McMillian, chief of the Game and Fresh Water Fish Commission's Communications Division, and president of Associated Public-Safety Communications Officers, Inc., delivers national report to Florida Chapter members, at the mid-winter conference held in Panama City, Florida.

# Public Safety through COMMUNICATIONS

By GENE SMITH  
Information-Education Division

**H**OW BIG IS A big organization? I'd say that an organization whose president lives in Florida, whose three vice-presidents live in Washington State, Illinois and Texas, whose secretary-treasurer lives in Pennsylvania and whose trade journal editor lives in Michigan, is a sure bet to qualify whatever the answer to the question.

This widely dispersed group of administrators belongs to the Associated Public-Safety Communications Officers, Incorporated (APCO), whose president is J. Rhett McMillian, Jr., Chief of the Communications Division of the Florida Game and Fresh Water Fish Commission since 1948.

McMillian is the 32nd president of APCO and the first from a state conservation agency to hold this distinguished position. His leadership of the Association, which fosters and develops every phase of Public Safety communications and promotes cooperation between all city, county, state and federal agencies using radio communications equipment in this country, has been marked by notable success, coming largely from Rhett's straight-from-the-shoulder critical analysis of and direct approach to problems in Public Safety communications, some of which could eventually affect us all.

The mid-winter conference of the Florida Chapter of APCO was held in Panama City Beach, Florida in January. At the 3-day conference President McMillian's National APCO Report was certainly the highlight.

Here is some of what he said:

Concerning THE APCO BULLETIN, the national journal published monthly by the Association—"A

house organ such as the BULLETIN is a true reflection of its parent membership. If the membership contributes nothing then the magazine is nothing."

On matters pertaining to Civil Defense and Public Safety communications—"At the risk of causing an effrontery, it seems that working with the various Civil Defense agencies is largely unrewarding in terms of solid information which can be held in the hand. It is realized that this is probably caused by constant change and reformation within Civil Defense, diminishing budgets, undeclared wars and a chameleon arsenal which makes any permanent planning of population defense a practical impossibility. However, it would seem that those things which are relatively permanent in nature, such as Public Safety communications, would be the very things that would cause Civil Defense to be continually in contact with us with suggestions and plans for improvement—especially as they relate to their programs. Certainly, if anything is to ever be accomplished with Public Safety backup communications systems it is a fact that Civil Defense is going to have to learn *our* language, not us learn *theirs*.

"It makes one wonder what the condition will be during a real national emergency when the internal Civil Defense terminology, like a foreign language, hits the points of entry of the Public Safety communications in this country. Somehow we have not got the message across to the many local Civil Defense agencies. . . that their internal communications procedure, which may eventually end up on Public Safety terminals, should be better



geared to conform to our format and procedure. Certainly, Civil Defense has come to us if this warp in communications is to be straightened out, but first we have to invite them in terms which will make them understand the problem and thus respond in an understanding manner."

On a national communications procedure manual—"... we find ourselves looking squarely at the perplexing problem of establishing a nationally approved and used Public Safety Communications manual, including radioteletype, teletypewriter and voice communications. . . . We must have this manual. It is inconceivable to consider ourselves as an association of professional communicators without being in a position to furnish a needy Public Safety Radio Service with a means of improving their communications according to a relatively standard format. Civil Defense-wise, the manual is an absolute must if coast-to-coast communications are to exist."

Concerning APCO's Project Series Foundation—"I have recently attended a series of script readings and reviews of the audio-visual (material), which will be in the form of a color movie (about Public Safety communications) suitable for general public and TV viewing. . . . (It) is a worthwhile endeavor professionally produced and of the highest quality attainable in the motion picture industry . . . the Project will for the first time allow APCO to be introduced in a compelling manner to the general public. We must stop and remember that it is the public, after all, who will see to it that we get the frequencies we need . . . when they are better and more fully informed and decide to do something about it."

McMillian's entire report was published in the February edition of the APCO BULLETIN.

Who is this well-informed and outspoken leader, who, it is acknowledged by his colleagues, has guided and given real purpose to a national professional organization while also operating a top-notch radio communications system for the Game and Fresh Water Fish Commission?

Rhett McMillian was born in Aiken, South Carolina, on July 9, 1912. He moved to New Smyrna Beach, Florida during his early school years. He began his technical radio career in 1930 and in 1936 was Southeastern representative of a major radio tube manufacturer. He opened his own radio sales and service facility in 1938 which he operated until the beginning of World War II.

After a stint as a civilian technician with the Air Service Command he left the Federal Civil Service as an associate engineer and, in 1946, joined the Florida Department of Public Safety, where he became Chief of Communications. In 1948 he transferred to the Game and Fresh Water Fish Commission as its Chief of Communications.

Rhett designed and installed the Commission's radio communications system, the first high-band

statewide mobile relay system of its kind, and has constantly up-graded the system ever since.

As a division chief, Rhett is a member of the staff of the Game and Fresh Water Fish Commission and wears a Major's insignia.

He has a number of technical training courses to his credit and holds a Radio-telephone First Class License.

He is a past president of the Florida Chapter of APCO; was National Conference Chairman in 1957 and was chairman of the committee which authored the APCO Constitution and By-Laws. He created and founded the Confederate Communications Commission, a select group of nationally known communications personalities, and also founded the Florida Society of Communication Administrators.

Rhett also is a creative writer; edits the Florida DISPATCHER; and writes the editorial columns for the APCO BULLETIN.

With his very charming wife, Vivian, and their son, Buzz, he resides in New Smyrna Beach. A daughter, Ann Brindle, and granddaughter, Vicki, live in New Orleans.

Rhett's office is located in the Federal Communications Building at the New Smyrna Beach Municipal Airport.

How big, then, is a big organization?

Often geography has nothing to do with it. An organization is as big as the ideas that guide it and the mission it sets for itself. It is as big as its working administrators and active members (or employees) make it . . . and most of the organizations I know could certainly use a few more Rhett McMillians in both categories. ●





# Florida Wildlife Officer Directory

The Florida Wildlife Officer, like any other law enforcement specialist, is dedicated to helping the public; in this case the protection and conservation of Florida's wildlife, according to established regulations of public ownership. He is an expert on the laws relating to wildlife — and much more. He

is a source of information for hunters, fishermen and many other outdoorsmen.

The Wildlife Officer is YOUR local representative of the Game and Fresh Water Fish Commission. His philosophy is to *prevent* violations rather than *prosecute* violators.

**Northwest Florida Region:** John T. Brown, Manager  
**Office:** 226 Airport Drive  
 Panama City  
**Telephone:** 785-5352 and 785-8132

**Northeast Florida Region:** Robert M. Brantly, Manager  
**Office:** Lake City  
**Telephone:** 752-0353  
 (Jacksonville EL 3-6331)

## Area #1—Walton, Okaloosa, Santa Rosa and Escambia Counties

M. H. McCoy, Area Supervisor ..... Pensacola, Escambia

Officer	City and County
Carlton Jackson	DeFuniak Springs, Walton
John Miller	Freeport, Walton
Donald E. Barber	Niceville, Okaloosa
James C. Gilmore	Milligan, Okaloosa
W. J. Stewart	Milton, Santa Rosa
Ron Kelly	Jay, Santa Rosa
Barry Pierce	Pensacola, Escambia
Thomas G. Sweat	Walnut Hill, Escambia

## Area #2—Bay, Washington, Holmes and Jackson Counties

W. E. Ward, Area Supervisor ..... Westville, Holmes

Officer	City and County
W. A. Bowles	Panama City, Bay
W. J. Tiller	Panama City, Bay
Harry V. McClellan	Chipley, Washington
Claud Hicks	Vernon, Washington
Irvin B. Spence	Caryville, Holmes
B. L. Timmons	Marianna, Jackson

## Area #3—Calhoun, Gulf, Franklin and Liberty Counties

Walter Larkins, Area Supervisor ..... Bristol, Liberty

Officer	City and County
J. A. Carpenter	Blountstown, Calhoun
Ralph Donaldson	Blountstown, Calhoun
Tommy L. Jackson	White City, Gulf
Allen Legrone	Wewahatchka, Gulf
L. O. Montgomery	Apalachicola, Franklin
Carl Culbreth	Apalachicola, Franklin
Lothair Chester	Telogia, Liberty
A. W. McDonald	Bristol, Liberty

## Area #4—Leon, Wakulla, Gadsden and Jefferson Counties

Rhodus Hill, Area Supervisor ..... Tallahassee, Leon

Officer	City and County
Melvin Faircloth	Tallahassee, Leon
Harry Chapin	Tallahassee, Leon
I. M. Langston	Sopchoppy, Wakulla
Roy Sanders	Crawfordville, Wakulla
Joe Pickles	Havana, Gadsden
William H. King	Quincy, Gadsden
Lamar Odom	Monticello, Jefferson
H. R. Clemmons, Jr.	Lloyd, Jefferson

## Area #5—Madison, Taylor, Suwannee, Columbia, Hamilton and Baker Counties

Frank Johnson, Area Supervisor ..... Live Oak, Suwannee

Officer	City and County
Laurence Rossignol	Perry, Taylor
George Hendry	Madison, Madison
W. E. Edwards	Perry, Taylor
Kenneth E. Haughton	Shady Grove, Taylor
W. B. Kirby	Lake City, Columbia
Leon Walker	Lake City, Columbia
Carl L. Hawkins	O'Brien, Suwannee
Earl Young	Live Oak, Suwannee
R. K. Mitchell	Jasper, Hamilton
F. J. Conner	Macclenny, Baker
R. L. Thurmond	Macclenny, Baker
David Roberts	Jasper, Hamilton

## Area #6—Alachua, Levy, Dixie, Gilchrist and Lafayette Counties

Dave Starling, Area Supervisor ..... Gainesville, Alachua

Officer	City and County
L. M. Crews	Gainesville, Alachua
M. C. Sikes	Hawthorne, Alachua
Robert Phillips	Trenton, Gilchrist
Dave M. Mathewson	Chiefland, Levy
Willard Beville	Cross City, Dixie
Gordon Hurst	Mayo, Lafayette
Fred Kirkland	Cedar Key, Levy
Barney Pearson	Mayo, Lafayette
J. O. Hudson	Inglis, Levy
W. R. Hodges	Gulf Hammock, Levy

## Area #7—Duval, Nassau, Clay, Bradford and Union Counties

L. J. Barrie, Area Supervisor ..... Green Cove Springs, Clay

Officer	City and County
Crystal Buckhalter	Callahan, Nassau
Roger J. Peck	Green Cove Springs, Clay
H. K. Stalls	Jacksonville, Duval
Howard E. Smith	Callahan, Nassau
Mack C. Cook	Orange Park, Clay
W. F. DesRochers	Baldwin, Duval
A. W. Whitehead	Lake Butler, Union
John Metcalf	Keystone Heights, Bradford

To Be Continued Next Month



# BOATING

The spring boating season no matter what the style, is fast moving into high gear around the entire state

By ELGIN WHITE



**T**HIS IS THE MONTH that is, skipper! To me, there are two or three months in Florida that are simply ideal for boating . . . any kind of boating. April, May and October seem to be just right, weather-wise.

And Miss April, with her gentle zephyrs and temperatures that won't burn you alive nor give you a deep freeze, stirs boating blood like no other month.

Throughout our area, from the tannic beauty of the Suwannee River to the golden shores off Miami Beach and the Florida Keys, boatmen are coming out of hiding like relatives coming to Sunday dinner.

It would be hard for me to suggest the best area for a little family cruise this time of year, but I think I might be partial to a jaunt along Florida's northwest Gulf coast—the Miracle Strip.

April in Paris is nothing compared to an April run along these fabulous white beaches. Good starting point is Apalachicola, where a fine municipal launching ramp puts you into the Apalachicola River, and from there westward through Lake Wimico, the Intracoastal Canal, Choctawhatchee Bay, the waters of Panama City, Destin, Fort Walton Beach and finally, Pensacola.

We have made this run about three times, and every time seems more enjoyable. There is calm

water for the squeamish and even a little rough stuff for the brigands among us. When I mention rough stuff, I mean the waters of Choctawhatchee Bay and Santa Rosa sound and Pensacola Bay can get a little rough when a good nor'wester is piling in. Though most of the nor'westers moved on out with the vernal equinox, there are still some stiff blows in April, but it only makes boating along this route that much more of a challenge.

I sorta look for my old buddy, E. T. Bales, sports editor of the Chattanooga (Tenn.) News and Free Press to be suggesting we make another run along this route. E. T. went with us on a cruise down the Apalachicola back in October, and he fell in love with the place. He is a real boating "nut," and has never gone the route from Apalach to Pensacola, and I believe he might be gettin' a little itchy about taking that run. There are many, many Chattanooga-gans who come into this area every spring and summer, and the cruise would be a natural for Bales. And there isn't a nicer guy in the world . . . whether you're making a boat cruise or simply talking over a cup of coffee. This would be a much better world if there were more people like E. T. Bales in it.

If you're in southern Florida and don't want to haul all the way up to northern Florida for such a jaunt (but you should, if just for the change of scenery), give a buzz through the Keys some thought, or go over to the west coast for a run

*(Continued on next page)*



Effectiveness of hydraulic remote controlled trim tabs installed on an outboard cruiser that tended to list on starboard side at cruising speed is illustrated here. In the upper photo, the trim tabs are installed but control levers are in the "Off" position.







Boats leave each half hour for a leisurely cruise down the scenic Florida waterways at Homosassa Springs. Ducks, geese and all sorts of other wildlife are along the route for close viewing.

(Continued from preceding page)  
down the Myakka River. The state park there is a dandy, and for camping buffs, you can't find a better spot.

Or, give old St. Johns River some thought. From Jacksonville all the way to Sanford is an unforgettable boating run, especially when you reach the narrowing area of the river near Astor. Beautiful country, skipper, simply beautiful! And I am continually amazed at how many Floridians haven't made this boat trip! Now's the time!

GOT AN INTERESTING bit of information from Tempo Products out of Cleveland on a new trim-tab for boats. This is a pretty effective little gimmick, and is run on the hydraulic remote control system. These "trim-tabs" are installed aft of the transom and as far outboard as possible. With them a pilot can level off a boat that lists to one side (and almost all of them do), and he can also use these tabs to get his boat on a quicker plane. Regardless of unbalanced load, a boat can be kept on even keel with the trim tabs. You get better control at planing levels, too. If you're interested in this particular accessory for your craft, write Tempo Products, 6200 Cochran Road in Cleveland.

MANY OF OUR water skiing addicts have asked a lot of questions regarding the skiing set, and one of the many we get is "what is the best way to rig your hitch?"

There are many good ways, and a new rig has been introduced that might eliminate many trial

and error experiences. Called a Futurity hitch, it is a well engineered bar that is placed on the transom with its apex being well above the motor. The rig is hinged to tilt into the boat, eliminating climbing or reaching beyond the motor. The Futurity rig distributes stress throughout the transom and steering drag, skidding and cavitation are greatly reduced. Pull on the skier is from 3 to 4 feet above water, which is recommended height by the American Water Ski Association. The towhook on the rig is easily reached, too. The Futurity hitch seems to be a fine answer for correct rigging, and is not expensive as an accessory. It can be obtained from Kimball-Schmidt, Inc., of San Rafael, Calif. Costs just \$24.95.

REALIZING THAT MANY tourists these days are getting to see things via boat that ordinarily couldn't be seen at all, more and more Florida attractions are beckoning travellers onto the water. One such area, the blossoming attraction at Homosassa Springs, has a special leisure boat cruise throughout that fabulously beautiful area on large, flat-hulled sight-seeing craft.

The boats are berthed underneath the modern new restaurant at Homosassa Springs, right on U.S. 19, and the cruise takes nature lovers on a run through primeval Florida they had no idea existed. Cool, clear waters offer vistas to the depths of the springs, and ducks, geese, and various and sundry forms of wildlife line the waterways, begging for handouts from usually generous travellers. Homosassa took the cue from Silver Springs, Weeki Watchee, Rainbow Springs and other such attrac-



tions, and the boat cruise is now one of the best things going in the entire area.

If you have your own rig, you can move on westward to the fishing village of Homosassa itself, put in at Ducan McRae's boat slip, and cruise back up to the springs area yourself. This is truly fabulous boating country. I think it is really Florida's last primeval loveliness, and I hope it stays that way for a long, long time.

GET A LOT OF COMMENT from aquanuts who will take their boats into almost anywhere . . . through weeds, grass, sand, grit, slime, and sometimes through plain, good water.

So comes the natural query, "what's the best thing to do about marine grass and weeds?"

Best thing to do is stay out of them, but in many areas of our boating world this becomes an impossibility. So, you weed diggers can note that if you're gonna continue to move through the jungles, you had best select motors suitable to the conditions.

An important feature to look for in a good weedy-water motor is a leading edge on the lower unit which has an aftward rake to it so weeds will slide down and off. It should also be devoid of a projecting nose on the gear case.



This pretty skiing miss will find her aqua sport much easier with the Futurity ski hitch that is being produced for this particular phase of water recreation.

While a good weed-shrugging lower unit is of prime importance, there are some tricks which can accentuate its ability to navigate infested waters.

In some areas, bottom growths break off and float on the water's surface. Being thus in a horizontal position, they sometimes tend to wrap around the leading edge of a lower unit above the cavitation plate, which keeps them from sliding down and off. When this starts to happen, the tip-off is easy to recognize—the boat slows gradually and the spray pattern just behind the transom changes. The cure is simple and quick—stop, run in reverse for a few seconds to wash the weeds off, and continue as before.

To plow through extensive weedbeds it helps to move the motor's tilt pin to the rearmost hole. The additional tilt thus imparted to the lower unit's leading edge gives even more weed-shedding ability.

A technique used to get through some kinds of aquatic growths, such as hyacinths and lily pads, is to rush into them at full speed. The motor's fast-moving lower unit simply blasts them to shreds so there's no chance for them to start collecting on it. Do this *only* when you know the water's deep enough and free of submerged boulders so the passage won't risk damage or upset.

Better yet—just stay out of the weeds.

I HAVE BEEN IN many boats, but never in a canoe. Not even for a twenty-three skiddoo run in Central Park.

But canoes are making a heckofa comeback . . . if they ever left. Indians don't think so, and nowadays fun-loving outdoors people are turning to the versatile canoe for all sorts of aqua pleasure.

There is a small Florida company that is producing a new canoe that should make outdoorsmen out of all of us.

Jackson Canoes of Longwood, Florida, are producing what they call America's most versatile craft. The Jackson folks are producing a fiberglass canoe with what they call a "reinforced molded-in TUMBLE HOME." Don't know exactly what that is, but Ben Taylor over in Daytona Beach told me that this canoe is one that really resists tipping. In fact, it is so stable you really have to work at tipping it over!! Now, this is MY kind of canoe, 'cause I swim just like a rock.

The Jackson canoe has been produced with a truly flat bottom, and then reinforced with aluminum to add more strength. In fact, I saw three huskies (all averaged over 200 pounds each) standing in one of these canoes placed between two sawhorses, and the bottom didn't budge a whit!

Ben says the flat bottom, with the TUMBLE-HOME sides (that's being patented, so I don't know

(Continued on page 34)



# MUZZLE FLASHES



The type of hunting preferred, plus gun handling abilities should determine the style of gun to use

By EDMUND McLAURIN

**F**IELD TECHNICAL RESEARCH indicates that probably most misses on feathered game occur because of shotgunners shooting behind their targets instead of too far ahead.

The same study shows a decided modern day preference for multiple, fast-firing autoloaders.

The findings undoubtedly have close relationship. . . .

Consider that successful upland shotgunning calls for application of one of three basic firing techniques:

The gunner can snap-shoot his weapon like a hastily shouldered rifle, a method that is frequently advantageous when shooting an open-bored barrel on close, fast-flushing game.

Then there is the pointing-out technique, whereby the shooter judges target angle, speed, range and required muzzle lead; takes the figured lead and swings gun steadily to maintain that lead—and fires deliberately. This method calls for considerable practice to be consistently successful.

In the third—the method I consider best—the shooter starts his gun-swing slightly behind his target, picks up gun speed until muzzle is moving faster than the target, and touches off the shot just as the swing passes through the target, neither slowing nor stopping the applied gun-swing until results are obvious. This follow through is comparable to that of a golfer's attempted long drive or a basketball player's arm follow through on a scoring try. . . .

Consider, too, that most autoloading shotguns, especially the older models, are heavier than pump guns and many doubles because of the numerous parts embodied in their mechanisms. (Notable exceptions are certain models in the Franchi line, an Italian import of the Stoeger Arms Corporation, American distributors.) . . .

Now, where a long barrel is also a major component of an autoloading shotgun, the gun is apt to be heavy in the hand as well as muzzle heavy, and slow to align because center of gravity is undesirably forward.

Besides being slow to point, too heavy a gun for your physique can be conducive to fatigue and poor shooting.

Only when pass shooting from a goose blind, or

when competing in trapshooting—two forms of shooting where deliberate gun pointing is common practice—do heavy, long barreled guns come into their own. In these two specific applications, the increased sighting radius of a long barrel is an advantage.

Gun weight is not apt to be noticed much where the shooter merely traverses the narrow arc of shooting positions on a trap or Skeet range and rests himself and his gun between shots, or spends all his hunting time in a blind.

It is something else again when the shotgun must be carried for long hours and miles, as must upland gunners and those who hunt deer with buckshot deep in the Southern swamps. . . .

Generally, a light, balanced, fast-pointing shotgun with 26 inch length barrel will prove best for all upland gunning. It will also perform admirably from a duck blind overlooking a set of decoys and serve as a deer gun when used with buckshot or rifled slugs. The 26 inch length barrel brings a gun's point of balance closer to the center of receiver. On the whole, it constitutes the ideal barrel length in an all-purpose shotgun, whatever the make. . . .

If your shooting is being handicapped by using too heavy a shotgun that slows your gun pointing and gun-swing, and fatigues you to carry it afield, you should do something about it.

If your preference is a shotgun of autoloading type you should investigate the gun handling qualities of the Franchi, considered by many to be the world's lightest and finest autoloader.

In the Franchi line, you can get a 20 gauge autoloader as light as 5 pounds, 1 ounce, and a 12 gauge that will tip the scales at only 6 pounds, 6 ounces, depending on whether you purchase a Franchi 48AL model featuring an exceptionally light alloy receiver, or the 48A classification steel receiver.

Despite their lightness, the Franchi autoloaders are not shoulder bruisers when fired by a shotgunner who knows how to properly shoulder and cheek a smoothbore.

To a shooter who has been shooting a heavy, fatigue-inducing autoloader, a Franchi can be a revelation! A couple of years ago I really put a Franchi through a series of uncommonly exhaustive tests.





The Franchi, Italian made autoloader, is often referred to as the world's lightest and easiest shotgun to handle under a variety of shooting conditions.

It came through in fine style. Above all, it was a joy to shoot, whether used for almost continuous shooting at thrown clay targets or intermittently on upland game. (Model tested was the "Hunter" listing in the Franchi line.)

The Franchi autoloaders are made by the firm of Luigi Franchi, Brescia, Italy, a Continental manufacturer of sporting arms since 1868. As imports for the American market, they reach retail outlets through the Stoeger Arms Corporation, South Hackensack, New Jersey.

The autoloaders are true semi-automatics (the trigger has to be activated manually for each shot), made on the basic working principle of the long-recoil system, utilized and patented by John M. Browning.

Although made only in 20 and 12 gauge both regular and Magnum shell chamberings, the Italian product can be had in several gun weight choices, in plain, matted, or ventilated style barrel of 24",

26", 28", 30" and 32" length, either fitted with Poly Choke selective choke device or unadorned barrel bored shooter's choice of Improved Cylinder, Skeet, Modified or Full Choke. Barrels are chromed. The extra-smooth finish contributes to delivery of consistent shot patterns and long barrel life.

For the many who want to use a shotgun bored primarily to handle rifled slugs, a special slug model with 22 inch barrel is available, in either 20 or 12 gauge. There is also a turkey model, featuring a long, 36 inch barrel and turkey scene engravings on the sides of the receiver.

The 12 and 20 gauge Magnum models operate with 3-inch shells, but come with spare recoil and friction springs that can be easily substituted when using 2½" and 2¾" shells of standard velocity.

All of the Franchi model autoloaders are five shot repeaters—four shells in the magazine, plus one in the firing chamber. For legal use on American waterfowl, a wooden magazine plug is furnished with each shotgun, to convert the weapon to legal three shell maximum loading.

Besides wide choice of barrel lengths and chokes, the Franchi can be had all fancied-up for those shooters desiring ornamentation. For those able to pay the price, engraved, gold decorated models can be had right on up to \$1,200.

So far as looks are concerned, the "Hunter" model, featuring game scenes on both sides of receiver, a select walnut stock and full length ventilated rib, probably is the best all-around buy for the average sportsman.

Extra barrels of specified length and choke boring can be had. Barrels and all other parts of Franchi autoloaders are readily interchangeable and do not require any factory or local gunsmith adjustment.

A convenience for the shotgunner who is likely to encounter a variety of game is the Franchi feature of permitting quick substitution of a different size shot load for a shell already in the chamber, without also unloading the magazine. Unfired shells stored in the magazine are locked in place until the shell in the chamber has been manually changed. Once the breech block is snapped shut on the substituted shell, the weapon resumes its continuous shell feed.

The bluing work done on the Franchi autoloaders merits mention. The color is a deep blue; the finish, satiny in appearance. Some American made guns

*(Continued on page 34)*



Pump action shotguns are usually lighter in weight and can be less tiring to carry when spending long hours afield. Too heavy a shotgun for your physique can slow your gun pointing, especially on close-flushing birds.



## CONSERVATION SCENE

(Continued from page 4)

this species is threatened over much of its range.

Secretary Udall directed that bald eagle nesting sites on National Wildlife Refuges be closed off to protect the birds from disturbance during the nesting season. Approximately one square mile will be provided for each nesting area.

Udall also instructed that nesting areas, where appropriate, be included in designated natural areas to prevent further disturbance of cover.

The order states that timber cutting operations must not be permitted within one-half mile of trees containing bald eagle nests, and potential nest sites must be carefully preserved. It extends to any or all of the approximately 300 refuges if eagle nesting is indicated.

In cases where trees with nests are in danger of being blown down, the trees are to be stabilized, if possible.

The Interior's Bureau of Sport Fisheries and Wildlife, which administers the Refuges, will make every effort to inform the public of the plight of the bald eagle.

"The best protection that can be provided for the bald eagle," he said, "is that which can come from an informed and concerned public. This has been well demonstrated in the case of the whooping crane."

In addition to ordering increased protection for the bird that is the symbol of American Democracy, a stepped-up effort was directed to protect the nests of golden eagles and ospreys.

The bald eagle already is classified as "rare" in the Southeastern States, where a survey in 1963 showed 230 active nests. Reproduction was successful in only 96 nests, with an estimated total of 144 young. The total population in the contiguous 48 states was estimated at about 5,000 in 1963.



New steps are now being taken to halt the rapid decline of the bald eagle.

John S. Gottschalk, Director of the Bureau of Sport Fisheries and Wildlife, said bald eagle reproduction apparently was less successful last year than usual except in Everglades National Park in Florida, where about 50 pairs of adults nested with 50 percent success.

Causes of decline are believed to be illegal shooting, the increase of human population in primary nesting areas, disturbance of nesting birds, loss of nest trees, and a possible reduced reproduction as the result of pesticides taken in food.

Both bald and golden eagles are protected by Federal laws. Several states protect the bald eagle, some protect the golden eagle, and some protect both. The maximum Federal penalties for killing or possessing either is a fine of \$500, or six months im-

prisonment, or both. The laws are enforced by the Bureau of Sport Fisheries and Wildlife, which also is carrying out research to determine the effects of pesticides on eagle reproduction.

In the Southeast, the National Audubon Society is conducting intensive investigations of bald eagle distribution and breeding and is studying factors causing the decline in population.

The Florida Audubon Society has obtained agreements with landowners of 2,300,000 acres where nests are located to have the nesting areas treated as sanctuaries.

### State Parks Museums

COMPLETION DATES for two new museums and two remodeled museums at Florida state parks have been announced by State Parks Director Bill Miller.

The new museums are at San Marcos de Apalache Historic Memorial near St. Marks and at Tomoka State Park near Ormond Beach. New exhibits are being installed at Alfred B. Maclay Gardens near Tallahassee and Constitution Convention Monument near Port St. Joe.

The San Marcos de Apalache museum is scheduled to be open to the public April 1. The building will house artifacts and ex-

### Florida Wildlife Officer Law Enforcement Report

Statewide Report of Arrests for January and February 1966

	Arrests	
	Jan.	Feb.
<b>Hunting Violations</b>		
License or Management Area Permit .....	42	27
Night Hunting, gun and light .....	14	18
Illegal Deer or Turkey Hunting .....	13	3
Illegal Quail or Squirrel Hunting .....	1	2
Alligator Hunting or Possession of Hides .....	1	0
Migratory Bird or Waterfowl .....	35	9
Other (guns in refuges, unplugged guns, etc.) .....	35	42
<b>Fishing Violations</b>		
Fishing License .....	99	159
Illegal Transportation, Fresh Water Fish .....	0	0
Illegal Taking of Fresh Water Fish .....	10	7
Over the Bag Limit .....	0	3
<b>Boating Safety Violations</b>		
Equipment .....	32	58
Registration .....	1	15
Operation .....	0	11
<b>Total Arrests</b> .....	<b>283</b>	<b>354</b>



hibits depicting the history of the 300-year-old Spanish fort.

The museum at Tomoka State Park is expected to open August 1. Included among the exhibits will be works of Fred Dana Marsh, internationally-known architect and sculptor who executed the statue of the legendary "Chief Tomokie" in the park.

New exhibits are expected to be complete at Alfred B. Maclay Gardens State Park during March. These exhibits are in the Maclay House depicting facts of the Maclay family interests.

Constitution Convention Monument's remodeled displays are scheduled for completion September 1. This is the site of the meeting place of the first State Constitution Convention.

### Pesticide Residues

RESIDUE OF SOME persistent pesticides are now found in animals throughout the world, according to a Department of the Interior scientist.

Dr. E. H. Dustman, director of Interior's Patuxent Wildlife Research Center at Laurel, Maryland, said the pesticide residues found in fish and wildlife show that these chemicals have penetrated every portion of the environment.

Dr. Dustman spoke recently (February 2) at the Public Symposium on the Scientific Aspects of Pest Control being held in Washington, D.C. under auspices of the National Academy of Sciences and the National Research Council.

In a discussion of a new National Pesticide Monitoring Program, Dr. Dustman said chlorinated hydrocarbon pesticides have been found in nearly all vertebrate samples analyzed in recent years.

Included in the sampling were migratory waterfowl and their eggs, bald and golden eagles, many kinds of small birds, all species of big game, and fish and shellfish.

The most commonly reported

pesticide residues are DDT, dieldrin, heptachlor epoxide and benzene hexachloride. Dr. Dustman said many of these will persist in the environment for years after they are applied.

He said that many people are engaged in research to learn the quantities of residues which may be hazardous, but there is concern that such quantities may accumulate before evaluation can be completed.

The monitoring program, coordinated by the Federal Committee on Pest Control, is a comprehensive effort to ascertain, on a continuing basis, the levels of pesticide residues in people, fish and wildlife, food and feed, soil and water. In the Fish and Wildlife Service, the monitoring involves samples of estuarine bottom sediments and selected forms of vertebrates and shellfish which serve as indicator species.

Those forms of wildlife that occur at, or near, the top of food chains reflect the residues found at lower levels in the food chain network. Fish to be monitored, in order of preference, are carp, buffalo, black bass, channel catfish, green sunfish, yellow perch, rainbow trout, and squawfish.

Wildlife species to be monitored will include the mallard, black duck, starling, and bald and golden eagles. Oysters, clams, and bottom sediments will be studied to determine residue levels in estuaries.

All the samples will be taken from widely spread geographic localities and at different seasons to give a representative evaluation, Dr. Dustman said. ●

### **CORRECTION!**

In the March 1966 issue of *FLORIDA WILDLIFE*, on page 12, in the *Boating* article about Fort Jefferson on the Dry Tortugas, mention was made that "fueling facilities" were available on the island. This is not the case, and boaters are warned to carry enough gas for the entire trip—to and from Fort Jefferson. Further information may be obtained from the National Park Service, P.O. Box 279, Homestead, Fla., 33030.

### **HUMAN SELF-INTEREST**

*(Continued from page 5)*

impartial adjudications to come along and challenge his bias. This is an area of debate which too few conservationists have any stomach for.

Take the simple example of bounties on so-called predators. The subject is centuries old, and to listen to some sportsmen one would conclude that is the last word in preserving game species. Bounties are simply a technique employed to save game species so that MAN can reap a greater harvest. But without predators it has been proven that some species can become self-destructive. In other words, all conservation efforts are based on human self-interest, so why surround them with a false aura of human nobility which does not exist?

This dissertation is not an argument for or against anything other than the need for being honest with ourselves. The struggle for mass culture has not been lifted into an era of intellectual probity where people live in density but still preserve their own dignity and that of their surroundings.

It is repeatedly stated that there is need for more conservation education, which in reality is nothing more than an attempt through social enlightenment to emphasize self-discipline as a basic ingredient of wise conservation. In other words, conservation education is a venture in social responsibility. This will not come about until more people see a moral as well as a social relation to the use of resources. Of these latter we have not yet begun to test the depth of our convictions.

In my opinion this is what Dr. Pengelly is telling us in his paper, "The Art of Social Conservation"—that we are going to have to test the depth of our convictions regardless of how unpalatable they are. ●



## **BOATING** (Continued from page 29)

what it is) makes this canoe the safest ever built. You can paddle 'em, sail 'em, go surfing with 'em, or fishing with a small motor. That does make for a variety canoe, doesn't it?

No wonder canoe addicts are jumpin' with joy. Might even try one myself.

SPRINGTIME IS A BUSY time for auto dealers, and likewise, this time of year brings out the green stuff with boat buying addicts, too.

Which brings up a thought . . . which comes first, the chicken or the egg? No, I haven't flipped yet . . . what I'm getting at . . . are you a guy (or gal) who chooses the motor first and then the boat to match . . . or vice versa?

Actually, it can be done either way. If you have really flipped over a special kind of motor, it is simply a matter of getting a boat to match its power. However, experience shows most boaters select the boat first and then get a motor to fit the load it will normally carry or the kind of duties it will perform.

In selecting a rig there are a number of things to consider such as the nature of the waterways

involved, trailerability, availability of launching sites, size of the family, degree of comfort wanted, etc.

Having picked your boat, now think of the power pack. One of the nice things about "going outboard" is that having selected a boat, it is possible to choose and quickly install the amount of power that is ideal for the boat and the performance desired.

The correct power for any given boat isn't a cut-and-dried matter of length or weight, or even of weight and length combined. There are other things, too.

For example, hull design is involved. One boat may like more power than another when climbing onto a plane. Or, one boat may be perfectly controllable with a large motor while another tends to get skittish at full throttle.

Some people shop for bargains, often buying boat and motor from separate sources. After trying out such a rig they realize to their chagrin that a mismatched rig is far from being a bargain; it is money down the drain, so to speak. The sensible thing is to do business with a well-established marine dealer. His advice is free and it guarantees that you will get the best possible boat and motor combination. ●

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## **MUZZLE FLASHES** (Continued from page 31)

could well be improved in eye and sales' appeal by emulation.

As a firearm, the Franchi shotgun is notably safer to handle than many other shotguns, simply because it has both built-in safety features and visible safety reminder.

The manually operated safety is just behind the trigger, and is controlled by a button that protrudes from the right side when the safety is blocking the trigger mechanism. To ready the gun for firing, the safety button must be pushed until it protrudes from the opposite or left side. The position of the button, for "Safe" or "Fire," can be felt with the fingers. Warning that the gun is ready to fire is also indicated by a visible red dot on the head of the safety button.

Mechanically, it is impossible to fire the gun unless the breech bolt is completely closed and locked. If the action does not fully lock on a loaded shell, this automatic safety feature prevents shell firing and possible gas leakage.

As with the Browning shotgun of long-recoil system, to avoid firing troubles or malfunction, it is important that the Franchi's brake friction rings be placed in correct position.

The Franchi's bronze friction ring must be infallibly assembled with its outside bevel towards the barrel ring, to fit the inside bevel of the barrel ring, as the gun's designers intended. Similarly, the steel

friction ring takes correct position when it is placed between recoil spring and bronze friction ring.

With a new gun or when light loads are fired, the steel friction ring must have its inside bevel towards the recoil spring. When using high velocity shell loads, the inside bevel must be against the bronze friction ring.

Replacement of the recoil spring of a Franchi autoloader—as with Browning shotguns made on the same operating principle—is recommended. With age and hard use, even the best of steel springs will develop a natural weakening, and in some instances actually get shorter (as weakened spirals move closer together).

Some shooters complain that autoloaders, whatever their make, are not reliable mechanically. Invariably trouble can be traced to improper adjustment, wrong ammunition or neglect, rather than gun itself.

Mechanisms of autoloaders should be kept scrupulously clean and only lightly lubricated. A preparation known as XF-15, or a similar graphite coating, should be the only lubrication, especially if the autoloading firearm may be used in freezing weather. Likewise, exclusive use of plastic shell cases of proper chamber length will greatly reduce chances of faulty shell feeding or extraction.

That gun care advice applies—whether you shoot one of the "joy to use" lightweight Franchis or some heavy heirloom that should have been retired long ago. ●



FOR THAT  
**BIG ONE**  
THAT  
**DIDN'T**  
GET AWAY



## FLORIDA WILDLIFE'S FISHING CITATION

is available without charge, to any and all subscribers to Florida Wildlife Magazine, and their immediate families, who catch any of the fresh-water game fish of the prescribed species and size requirements. Citation, showing recorded date of the catch, will be mailed to the applicant upon receipt of the following application form that has been properly filled out and signed.

Only fishing citation applications received within 90 days from date of catch will be honored.

### APPLICATION FOR FLORIDA WILDLIFE FISHING CITATION

The Editor, FLORIDA WILDLIFE \_\_\_\_\_ Date \_\_\_\_\_  
Game & Fresh Water Fish Commission, Tallahassee, Fla.

Please send me the Florida Wildlife Fishing Citation with the inscribed data listed below:

Name (please print) \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

Species \_\_\_\_\_ Weight \_\_\_\_\_ Length \_\_\_\_\_

Type of Tackle \_\_\_\_\_

Bait or Lure Used \_\_\_\_\_

Where Caught \_\_\_\_\_ in \_\_\_\_\_ County

Date Caught \_\_\_\_\_ Catch Witnessed By \_\_\_\_\_

Registered, Weighed By \_\_\_\_\_ At \_\_\_\_\_

(Signature of Applicant)

CUT OUT AND SAVE THIS APPLICATION BLANK

### ELIGIBILITY REQUIREMENTS SPECIES

#### LARGEMOUTH BASS

.....8 pounds or larger

#### CHAIN PICKEREL

.....4 pounds or larger

#### BLUEGILL (BREAM)

.....1 1/2 pounds or larger

#### SHELLCRACKER

.....2 pounds or larger

#### BLACK CRAPPIE

.....2 pounds or larger

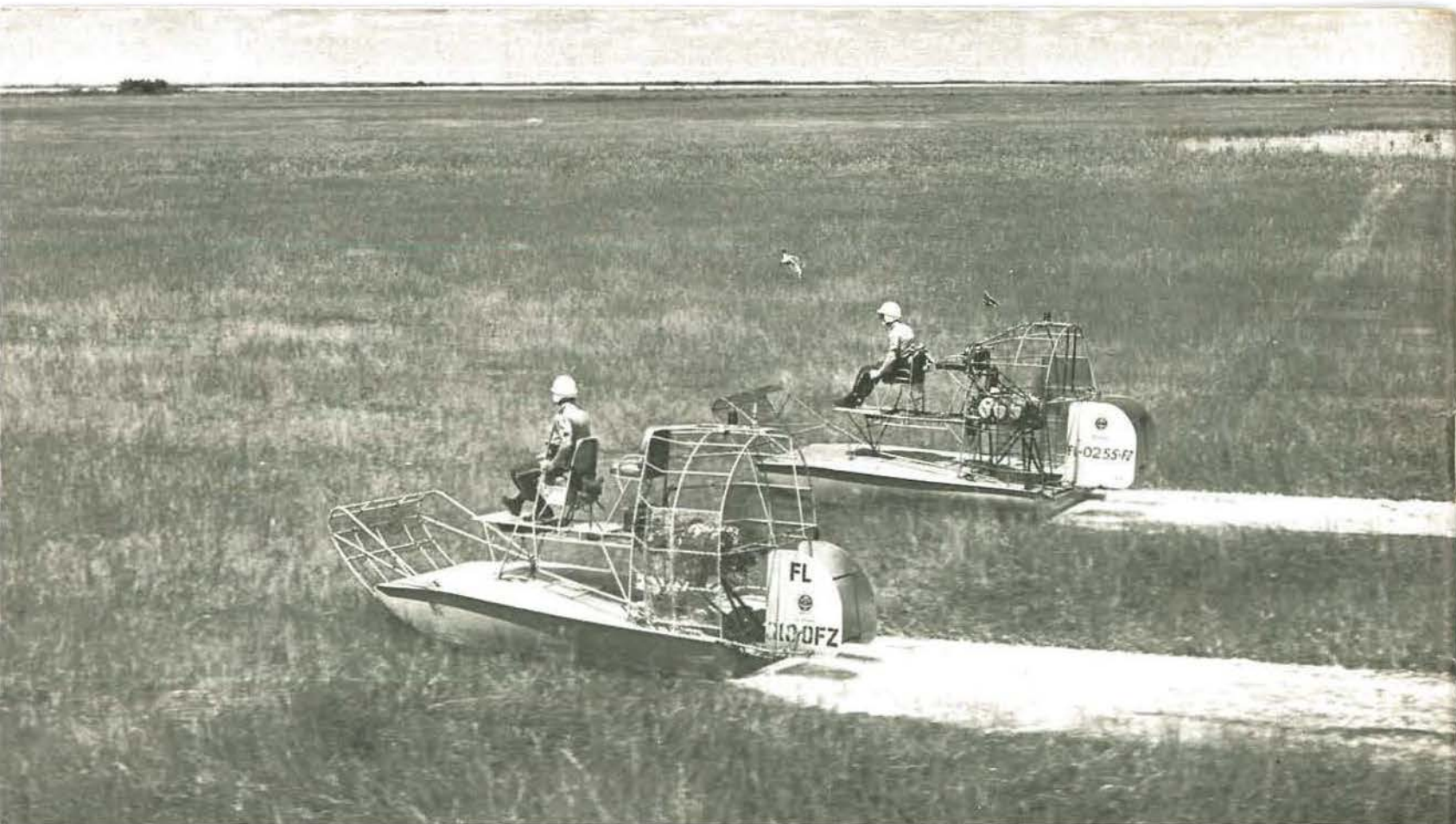
#### RED BREAST

.....1 pound or larger

All fish must be taken from the fresh waters of the state of Florida, as defined by the Game and Fresh Water Fish Commission. Fish must be caught on conventional fishing tackle, with artificial or live bait, in the presence of at least one witness.

The catch must be weighed and recorded at a fishing camp or tackle store within the state by the owner, manager, or an authorized agent of the respective establishment.





Wildlife Officer Law Enforcement—Everglades Style. Photo by Jim Brantly

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